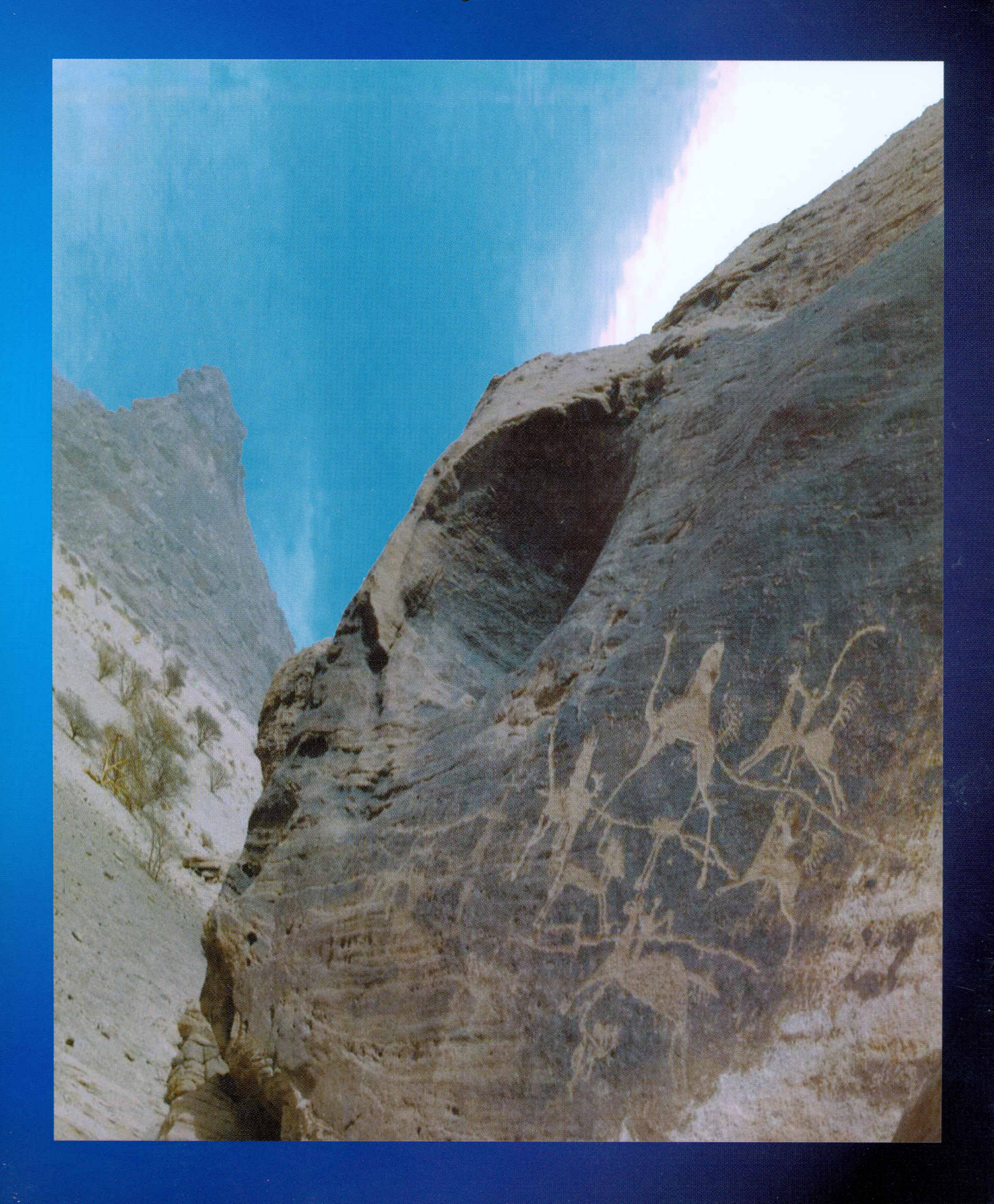
ROCK ART STUDIES

(How to study rock art)

Dr. Majeed Khan



ROCK ART STUDIES

(How to study rock art)

Majeed Khan



I dedicate this book to the students and youths of this country with the hope that they will realise and understand the importance of rock art and shall preserve, protect and understand the hidden message of their ancestors left by them in the form of petroglyphs and paintings on the rocks and hills all over the country.

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FOREWORD

Over the last 35 years the Saudi Arabian archaeology has changed from its rudimentary budding phase to a well developed subject and has come to the age. But, unfortunately rock art is still an odd subject although, no other class of artifacts are as widely distributed in Saudi Arabia as the hundreds and thousands of petroglyphs of human and animal figures. Thanks to the efforts and contributions of Dr. Majeed Khan that we have now a better knowledge of Saudi Arabian Rock art. During the last 30 years of his association with the Deputy Ministry of Antiquities and Museums Dr. Khan has participated in the Comprehensive Rock Art and Epigraphic Survey of the entire country. This program was started on his initiative and suggestions by the Deputy Ministry. Later Dr. Khan acquired his Ph.D. on the rock art of Saudi Arabia and as such became the pioneer researcher and founder of rock art studies in this country.

The need for a book with over all perspective of how to study rock art was a dire need both for the students and teachers. The object of this book is to serve as a guide for the young researchers, students and teachers to identify basic aspects of rock art, its importance and distribution in the Arabian Peninsula and other parts of the world. Thus, it provides a condensed version of rock art studies, contained technical discussions and detailed examination of various aspects of rock art. At the same time, all the important citations of the sources and of the essential bibliography have been retained in the book. The illustrations represent an attempt to reproduce some of the most characteristic and significant specimen of local and world wide rock art, so that a student can easily follow and understand the meaning and purpose of this subject. The basic training of all archaeologists should be as diverse yet comprehensive as possible. The single most important learning experience that any student can undertake is to

plan, carry out, and document each point of his observations. Dr. Khan has shown how to do it in the study of rock art.

This book is the first of its type ever written in Arabic language for the students. I am pleased that at last the subject of rock art has come to an age of understanding and analyzing. The wide spectrum covered by this book provides basic knowledge of the subject to the students and all those who are interested in the study of rock art. It was a long awaited book, and as such, is the best contribution of a scholar who has shown his commitment and devotion to this as yet, neglected subject. Dr. Khan's contribution opens new avenues of research and investigation to the students of archaeology. His pioneer work on the rock art of Saudi Arabia will always be remembered, highly applauded and shall serve as a guideline for our young Saudi archaeologists in pursuit of their past cultural and traditional entities. Finally, I would like to thank the Deputy Ministry of Antiquities and Museums for encouraging and supporting Dr. Khan in his valuable study and research and publishing his scientific works. With the beginning of this distinguished era in the dawn of rock art studies of Saudi Arabia, I wish the Deputy Ministry a prosperous future enriched with serious efforts and scientific publications.

Professor Dr. Abdulrahman al- Tayyab al-Ansary

INTRODUCTION

Rock art is not taught as a subject in many countries of the world, and in spite of its importance, as yet it is a neglected subject in many Arab countries. Although, hundreds and thousands of rock art sites are located in Saudi Arabia, Jordan, Yemen, Egypt and other countries of the Arabian Peninsula, archaeologists did not pay serious attention to its study with the view that its dating and interpretation is not possible. A work of pre-historic art is like any other archaeological artefact and has a meaning, both for its original creator and for the student of anthropology and the archaeologists who want to understand the social, cultural, religious and economic entities of our past societies. Like any ancient monument, rock art is the only element found on the same place, in the same context, with its full contents and in same geographical and environmental conditions. Archaeological studies of Palaeolithic or Neolithic periods in Saudi Arabia totally depend on the surface objects located almost all over the country. We have no evidence of the activities of pre-historic people of Arabia with the exception of their artistic images that may reveal their dresses, weapons, animals on which they depended, their religion, social, cultural and economic entities.

I am pleased to present this book to the students of archaeology, anthropology and that of rock art in particular. It is the first book on the subject in Arabic and English. I am sure now, both for the teachers and students of rock art there is a guidebook to study rock art.

Hundreds and thousands of petroglyphs and pained images of human and animal figures, in addition to geometric and anon-representational motifs, are located on the hills, rocks, under rock shelters and in the caves of Arabian Peninsula, these images need proper documentation, analysis, dating as well preservation and protection. It is our cultural heritage and history of our ancestors who

created those artistic images at a time when there was no writing, as such these petroglyphs could be the only source of recording important events, stories or perhaps the messages.

I hope this humble presentation to the students of rock art will enhance the sense of importance and studying this neglected subject.

I extend my thanks and appreciations to my colleagues at the Deputy Ministry of Antiquities and Museums who always assisted and supported me in collecting material for this book. I am particularly thankful to Dr. Daifallah al-Talhi, who edited the Arabic version of the book. My personal gratitude and thanks to Dr. Mohammad Sulaiman al-Rowaished the Deputy Minister of Antiquities and Museums, who encouraged, facilitated and supported the publication of this book.

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CHAPTER 1

DESCRIPTION OF ROCK ART

What is Rock Art?

Rock, the basic element of this earth was probably the first object that man used from the earliest times as a most easily available object to make tools for hunting, cutting, butchering and removing animal skin. He used rock shelters and caves as his first home and used rocks to cover the rock shelters and caves and later built his home and other structures such as burials and sanctuaries, while the same stones were used to make idols and carve sculptures of deities; it was probably also used as the earliest tool for creating artistic images by engraving, pecking or rubbing rock surfaces to depict human, animal, and other figures. The art depicted on the rocks is called rock art, thus rock art is the artistic expression of man on rock surfaces. Rock art represents the earliest form of artistic creativity of non-literate people that date back thousands of years, as such it is one of the most important source of understanding the social, cultural and religious life of primitive people.

If archaeology defines the use of certain objects and artifacts, living conditions, architecture and development of cultures and civilizations, so does rock art. Prehistoric rock art may help in defining patterns of culture; when the assemblage can be identified chronologically, each figure in its specific style represents a different stage in the cultural sequence. Hence, through subject matter associations, rock art can reveal many aspects of human life. Rock art is the only element of prehistoric records which is still preserved and remains in its original place where it was created.

ART AND ARCHAEOLOGY

A work of art, like any other archaeological artifact, has a meaning, both for its original creator and for us, the pre-historians to understand the psychology of is user, What obviously distinguished the study of prehistoric art from other branches of archaeology, is the peculiar nature of its contents and contexts. Archaeological objects and art style can be studies and related. Just as an artifact represents a culture, a style also represents a culture of that specific period in which it was created. Thus, archaeology and rock art are part of the same subject and cannot be separated and should be studied together. The archaeologist's task is to reconstruct the situation in which a work of art was created and which had a specific meaning, purpose and role for those who produced and used it.

In archaeology, material culture consists of artifacts and the physical manifestation of human activities. The artifacts are a product of human workmanship; petroglyphs and pictographs are also artifacts like any other archaeological objects of human workmanship. The art was created by engraving, pecking or painting on the rocks, thus it is the result of human activity, here instead of objects, human and animal images were created and used for some specific purpose. These figures represent the record of the past which reveals human activities, economy, environment, beliefs and the fauna and flora on which the ancient men and women depended. The animal figures help to reconstruct the past environment and ecology as well as geographical and other factors which ordinary archaeology cannot. Rock art is not a discipline but a science. It is more appropriate to say that the study of rock art is a separate branch of archaeology, but not a separate subject.

ROCK ART - A Universal Phenomenon

Recent investigations in different countries of the world reveal that man was engaged in artistic activities since times unknown. Thousands of rock art sites are located all over the world. The discoveries of painted caves in Europe, and rock art sites in Australia, Africa, South America, Asia and the New World testify to the fact that rock art is a universal phenomenon. Prehistoric people started to carve and paint long before the invention of writing.



Figure 1. A large composition of daggers and animal figures, Italy. *(After Paul Bahn 1998)*

It is quite possible that the idea of writing might have originated through the use of signs and symbols which man initially developed for certain unknown purpose. It also seems reasonable to assume that prehistoric people initially depicted animals that were part of their environment, life and economy. Later sounds were developed for those animals and hence language originated. The symbols and signs gradually took the form of letters and developed into writing.



Figure 2. Paintings in a shelter in the Ga`aseb Gorge of Namibia`s. (*After Paul Bahn 1998)*

We define prehistoric cultures as preliterate on the basis of our modern communication system, but we do not know whether the prehistoric communication system based on rock art images as signs and symbols was to what extent fulfill the need of pre-historic communication and when it was first originated.

If rock art was used for some kind of communication then the creators of these images cannot be described as "preliterate" rather they represent the earliest literate societies. However, there is no doubt that the merit of writing system originally goes to the prehistoric people who used rock art as the first means of pictographic and symbolic communication system.

SAUDI ARABIAN ROCK ART IN UNIVERSAL CONTEXT

Rock art is a universal phenomenon; recent investigations in different countries of the world reveal that man was engaged in artistic activities since times unknown. Thousands of rock art sites are located all over the world. The discoveries of painted caves in Europe, rock art sites in Australia, Africa, South America, Asia and the New World testify to the fact that rock art was practiced almost all over the world. Prehistoric people started to engrave and paint long before the invention of writing. It is quite possible that the idea of writing might have originated through the use of signs and symbols which the ancient artist initially developed for certain unknown purpose. It also seems reasonable to assume that prehistoric people initially depicted animals that were part of their environment, life and economy. Later sounds were developed for those animals and hence language was originated.



Figure 2b. Bushmen art from South Africa (after Paul Bahn 1998)



Figure 3. Negev desert. The tribal symbols (+) is found in Saudi Arabia also *(After Anati 1979)*

Origins of rock art cannot be defined as yet. It was initially thought that rock art originated about 40,000 years somewhere in southwestern Europe. Although, Europe's rock art attracted the attention of early researchers due to the location of most attractive painted caves of Altimara (Spain) and Lascaux (France). Recently the rock art at Foz Coa in Portugal, with its Ice Age figures has overcome previous discoveries in Europe. In Russia around Lake Onega, a particular kind of rock art was created in the Neolithic around 6,000 and 4,000 years ago. In Siberia, portable art have been located on a number of sites (Abramova 1990; Bednarik 1994 c). It is suggested that Siberian portable sculpture located at Tolbaga, contains an image

of an animal head which could be attributed to 35, 000 years BP (Bednarik 2003).



Figure 4. Petroglyphs from Negev Desert similar to that located in Najran area *(After Anati 1979)*.

150 decorated caves and rock shelters from the Paleolithic period are located in Europe, out of which 100 are found in France and 30 in Spain. The famous sites of Altimara and Lascaux are attributed to the Soultrean and Magdalenian period c. 30,000 to 15,000 years before present (Anati 1978).

In Italy, the Valcamonica valley is famous for its thousands of petroglyphs depicted on Mont Mego where a variety of human and animal figures, weapons and other nonrepresentational motifs.

The oldest rock at in North America was claimed to have located at Coso Range (California) where thousands of petroglyphs are located and most of them are attributed to a period of about 11,500 years BP. In other parts of North America as yet reasonably old rock art sites have not be discovered.



Figure 5. Stick human figure from Cochabamba, Bolivia. Similar figures are located on several sites in Saudi Arabia. *(After Chakarwarty & Bednarik 1997).*

In South America the cultural traditions and rock art contents are quite different to that of North America.. In Arrgentian the site of Cueva de las Manos contains hundreds of hand stencils while older petroglyphs have been located on the walls of a cave in western Argentina, Crivelli and Fernandez (1996) have attributed these to about 10,000 years BP. While Bednarik (2000 a), has claimed to locate the oldest rock art in Bolivia on the eastern foothills of the Andes at Inca Huasi.At Toro Muerto in Peru petroglyphs are found on thousands of stones.



Figure 6. Hand stencils, Cueva de las Manos, Argentina



Figure 7. Big horn sheep, Coso Range, California, USA. *(After Paul Bahn 1998)*.

Rock art sites are located in almost all the countries of the world, Some of the major rock art sites have enormous quantity of figures. The Darkensberg range in Lesotho, South Africa, includes 1,000 sites and about 1,000,000 figures. Arnhem Land in Australia has an estimated 1,000,000 figures. The Negev in Israel and Sinai in Egypt contains several sites with hundreds and thousands of images. In Saudi Arabia over 1200 sites are recorded from different parts of the country with enormous number of carved and pecked petroglyphs. The Alpine Range n Franco-Italy, Switzerland and Austria contain 16 areas of rock art concentration. Various areas in India and Pakistan, China and Russia, Argentina, Brazil, Chile, United States, Canada also contain large number of rock art sites, The Sahara, Tassili Ajjer in Algeria and Fezzan and Acacus in Libya are famous rock art areas. These are just a few names for example otherwise rock art is found in almost all countries of the world.

Africa contains the largest number of rock art sites in the world with more than one hundred thousand known sites. The quantity and quality are both highly sophisticated and out number when we compare this art with other countries of the world. The major sites in the Saharan desert are located at Tassili-n` Ajjer, in Algeria and the sites of Acacus and the Mathendous in Libya. In Libya the sites of Messak, Mellet and Settafet are famous for their dynamic human figures in various postures and scenes. Rock art is also located in Chad, Niger, Mali and in other north African countries. While in southern Africa, Tanzania with its 8,000 sites, Darkensberg with hundreds and thousands of images are famous for the variety both in style and art contents. In Zimbabwe alone over thirty thousands site are recorded.



Figure 8. Anthropomorphic representations in dancing attitude from Aplao, Arequipa, Peru. *(after Chakarwarty and Bednarik 1997).*

In Asia India, Pakistan, Iran, contain a variety of painted and petroglyh sites. The Kumaon Hills in the Himalayas region and richly painted caves of the Bhimbeka are famous rock sites of India. In Pakistan Balochistan and the hilly areas of northwestern region contain hundreds of petroglyphs particularly from the Budha period. In China, over 10,000 sites
have been recorded mostly from northern areas such as Helan Shan and Inner Mangolia. In Indonesia caves with painted figures and hundreds of stencils are found in Borneo.



Figure 9. Petroglyphs depicting skiers, possibly of the Neolithic period. Granite, Karelia, Russia. *(After Chakarwarti and Bednarik 1997).*

In Qatar major rock art sites are located at Jabal Jusasiyah, al-Furaihah, Jabal Fuwairat and al-Warkah. The petroglyphs mostly consists of camel, horse riders, donkeys, hand and foot prints boat and cup marks.



Figure 10. Boat and cupules located at Jusasiyah, Qatar

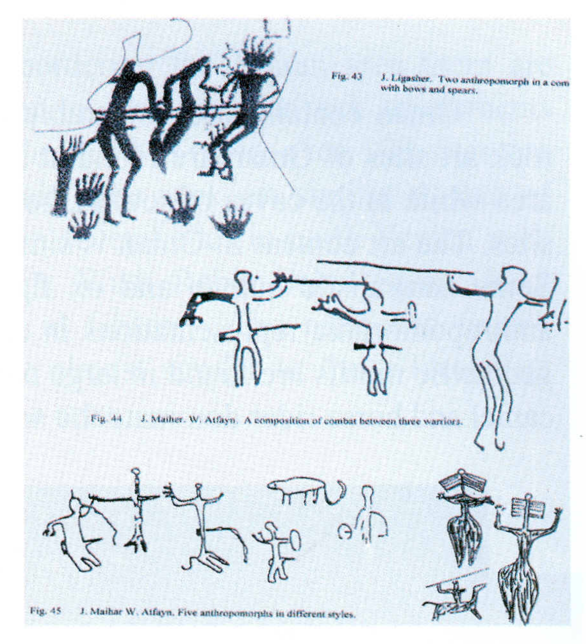


Figure 11. Rock art of Yemen

In United Arab Emirates, due to lack of hills and mountains, very few rock art sites are located. Major rock art sites are found at Wadi Ishi, Wadi Hulu, Wadi al-Hayl, Khatma Miliha, Wadi Hatta Jabal Hafit etc. Human and animal figures, such as horse riders, gazelles and deer and foot prints are mostly found on various sites in Arab Emirates.

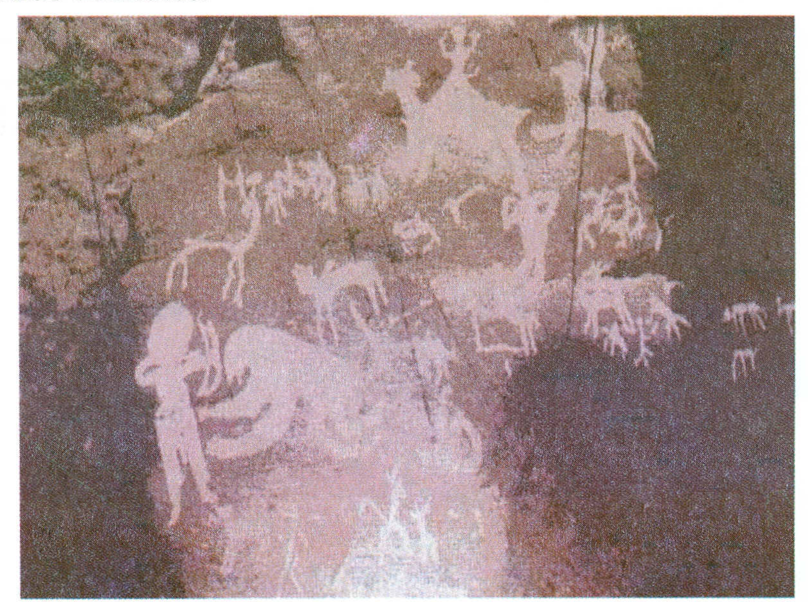


Figure 12. Lion hunter and other animals located at Wadi Daiqa, Oman.

Oman contains a considerable number of rock art sites. Major rock art sites of Oman are found at Jabal Akhdar and Shenah-Qatrah area while in the caves of south Dhofar are also located some painted sites. The art content in Oman is similar to that of the region at large. Some naturalistic human and ox figures and schematic animal and anthropomorphic representations in addition to hand prints and other geometric motifs are found in large number on various sites however, camel and horse rider dominate the art content.



Figure13 Animals in dynamic posture located at Khatma Mileha, Sharja



Figure 14. A long horned bull carved with deep outlines located at Jabal Saada, Yemen

Further south in Yemen bordering the Najran area there are several rock art sites with contemporary and similar rock art elements to that of southern Arabia. In the north Yemen over 100 sites are located in Saada, Sanaa and Rada. The rock art similar to that of southern Saudi Arabia is found on several sites in north Yemen such as Jabal Makhrouq, Jabal Jerfain, Wadi Robia, Jabal Sama, Jabal Maihar, Wadi Dhar and Shiban al Gharas. The male and female figures, long horned bovines are almost similar to those located at Baha, Bisha and Himma in Najran area.



Figure 15. Painting of camels from a cave at Dhofar, Oman

Aqaba Ma`an, Wadi Ram and Hisma plateau in Jordan contain major rock art sites and some of these are contemporary to that of Saudi Arabian petroglyphs.

However, in Middle East, Saudi Arabia contains the highest number of (1,200) rock art sites. The major areas of concentration are Hail, Jubbah, Shuwaymis, Tabuk, al-Ula and Tyam in the north, and Najran, Himma, Baha and Abha in the southern part of the country. A variety of human and animal figures in addition to tribal symbols or Wusum, and other representational and non-representational motifs are located in various compositions all over Saudi Arabia.

When we look at Saudi Arabian rock art in worldwide context, it stands among the richest rock art regions of the world and comes fourth in the world after Australia, Africa and India (Benarik 2003).

The Bedouins living in the desert were always aware of the rock art found in almost all areas of the Kingdom. However, they do not know who created these images on the rocks and there are neither verbal nor written records about the creation or use of hundreds of thousands of rock art sites found in Saudi Arabia. Jaussan and Savignac (1914) were the first to report epigraphic and rock art sites of Saudi Arabia. Later Horsefield and Rhottet (1938) wrote about one of the oldest rock art sites at Kilwa in northern Saudi Arabia. Parr, Holding and Dayton (1968); Winnet and Reed (1973, 1979) reported several epigraphic and rock art sites from Saudi Arabia. With the exception of Horsefield and Rhottert other visitors paid more attention towards the epigraphic material and rock ar4t was scarcely reported. In 1951-52 the Philby-Ryckman-Lippens Expedition surveyed certain parts of central and southern Arabia and collected a wealth of archaeological and epigraphic material. The said expedition passed on the rock art material to an Italian scholar Professor Emmanual Anati.

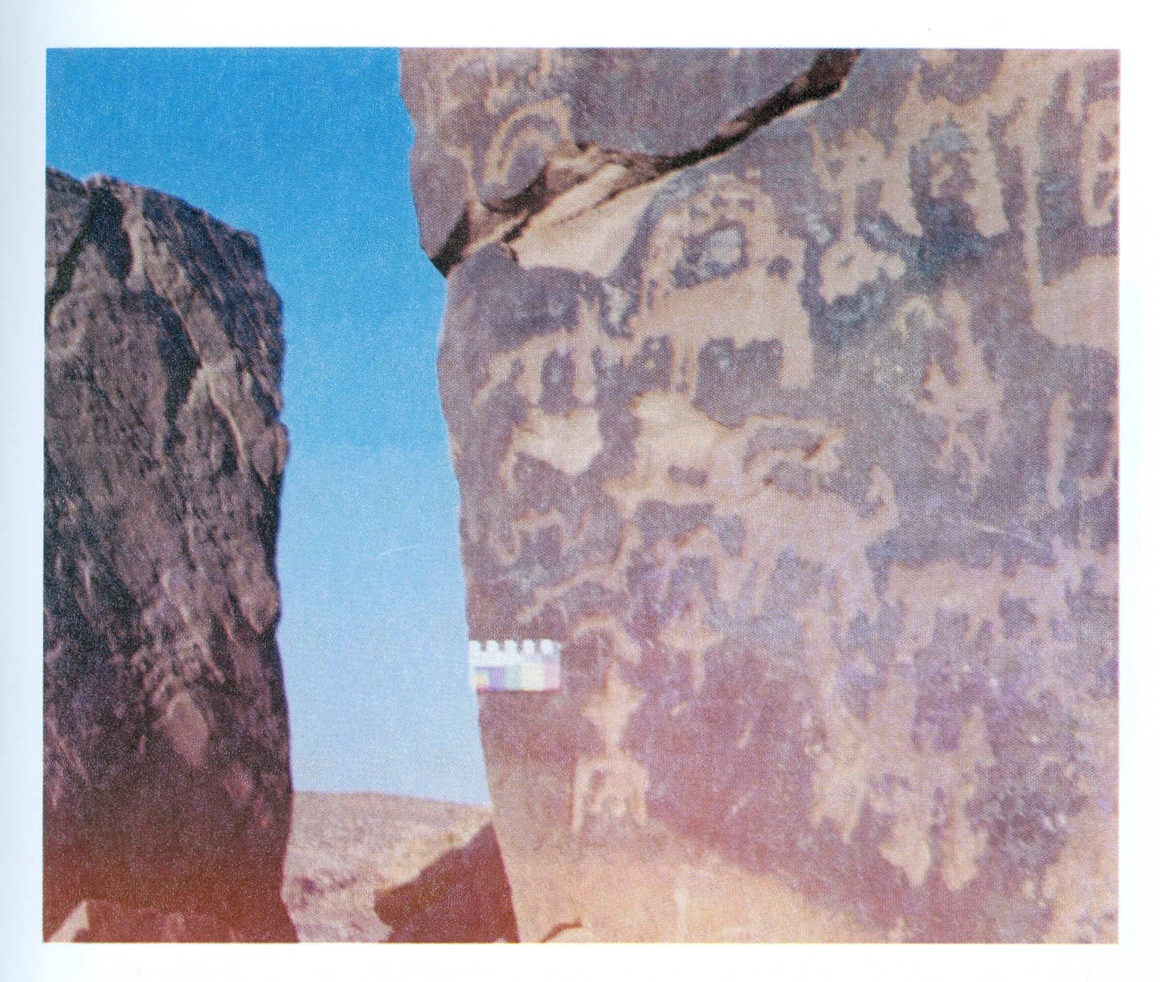


Figure 16. A rock art site near Riyadh.

On the basis of this material provided to him by Philby and others Anati produced four volumes of books on the rock art of Central Arabia. Except for the work of Rhottet and Horsefield (1938) and Anati (1968,72,74) little has been published on the rock art of the Arabian Peninsula. Some general articles have been published by Howe (1950) on Hejaz; Courteny-Thomson (1975) on Hanakiya; Clark (1979).



Figure 17. A rock art composition located at Himma, Najran, southern region.

Several brief reports on the rock art of Saudi Arabia were published by Zarin etal (1980,1982,1985) who recorded some rock art sites during the Comprehensive Archaeological Survey of the Kingdom, conducted by the Department of Antiquities and Museums under the auspices of the Ministry of Education from 1976 to 1986.

It was a common practice of archaeologist while working in the archaeological survey of the Kingdom to record only striking rock art panels and overlooking other petroglyphs. Even photographs provided by Philby-Ryckman-Lippen's Expedition to Professor Aanti were of some selective sites and panels, it is why Anati made serious errors in

analyzing and dating the rock art of south and central Arabia (khan 1993; Bednarik and khan 2001). Thus, realizing the importance of rock art the Department of Antiquities and Museums initiated a comprehensive rock art and epigraphic survey of the entire country.



Figure 18. Hunting camel in the desert

Proper rock art and Epigraphic studies began in the Kingdom when a large scale comprehensive rock art and epigraphic survey was initiated by the Department of Antiquities and Museums in 1984. The survey continued for over a decade during which over 1200 sites have been documented from various parts of the Kingdom (Kabawi etal 1985; Khan etal 1986,87,88, Zahrani etal 1990).



Figure 19. Cupules, hoof marks and foot prints, a composition of abstract human , animal figures and foot marks located near Tabuk.



Figure 20. Foot prtins and cup marks from Shuwaymis, northern Saudi Arabia, the oldest petrogyphs in the Arabian Peninsula.

For a long time archaeologists had the idea that pastoralists and nomadic Bedouins living in harsh and desert environment would leave little or no records of their presence. But, recent archaeological and rock art surveys and investigations have not only dismissed all previous assumptions, on the contrary revealed a tremendous amount of cultural material in the deserts of Saudi Arabia.

It is interesting that the rock art of Saudi Arabia represents the same animals with which the local population was aware and which were found in this part of the world such as cattle, camel, deer, gazelles, dogs, snakes, lizards and goats etc. Surprisingly no flora (with the exception of a couple of sites with date trees) and no birds except ostriches were depicted.



*Figure 21. A*rms with stretched fingers associated with an idol face. *Located at Jabal al-Kaukab southern Arabia.*

Thus, the artists chose some animals from their environment and depicted them on the rocks and overlooked other animals that were as good for them and were part of their ecology and environment. Rock art is thus, a universal phenomenon and everywhere in Europe, Africa, Australia or Asia the same tendency has been observed. It means that artists in various parts of the world

had the same intellectual, ideological and mental approach (Khan 1993, 2000).



Figure 22. Male and female figures and Musnad al Janubi inscriptions from Najran, southern region.

Having identified the content of the art and analyzed its style in terms of individual figures and their combination as composition scenes it is evident that Saudi Arabian rock art apparently seems to be symbolic, semantic and communicative and much older to all other rock art sites in the region. The artistic output as a whole may be meaningfully divided between standard scenes, scattered individual figures and scenes of particular elaborations or scale. We do not find large compositions of human and animal figures in the rock art of Yemen, Oman, Qatar, and United Arab Emirates. Also, the rock art of Saudi Arabia is much older. The rock art of Shuwaymis and Jubbah in northern Saudi Arabia is unique both in content and style and no

parallel of this art is found any where in the entire Arabian Peninsula. There are also no large concentration of rock art sites in Yemen, Oman or the Gulf countries like that of Shuwaymis, Jubbah, Hanakiya, Tayma, al-Ula, Tabuk And Najran in Saudi Arabia.



Figure 23. A large rock art composition of human and animal figures at Jubbah, north Arabia.

An art style is not like an artifact that can be traded intact across great distances. It is usually a very distinctive part of the mental traditions of a cultural group, thus were find that the artists of Shuwaymis and Jubbah were highly skilled and capable to portray their social, cultural, religious and economic entities artistically, on the contrary the art was not well developed or highly skilled in other

parts of the Arabian Peninsula. It seems that in the early Neolithic period an advanced civilization was already in existence in northern part of the Arabian Peninsula and that men first settled in the north and gradually migrated to the south due to the change in climate from cool and humid to hot and dry conditions. On the basis of rock art assemblage and hundreds of Paleolithic sites ranging from Acheulean to the Neolithic period, it is evident that early hunting and food gathering societies first appeared in the north and later migrated to the south. We do not find rock art in the Yemen, Oman and other Gulf countries which could be attributed to the early Neolithic period. There is apparently no similarity both in art content and large compositions of various types of petroglyphs in the rock art of Saudi Arabia and that of other neighboring countries of the Arabian Peninsula. Saudi Arabian rock art is rich both in its variety of animals and cultural activities shown in rock art compositions.

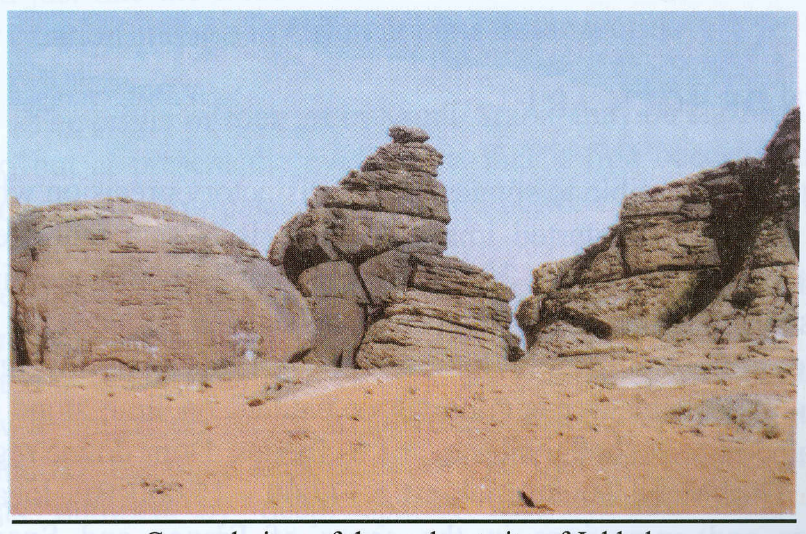


Figure 23b.

A large rock art composition of human and animal figures from Najran, Arabia.



Figure 24. Human and animal like figures from Shuwaymis, north of Saudi Arabia



General view of the rock art site of Jubbah.

HISTORY OF ROCK ART STUDIES

It is over hundred years when Paleolithic art was first discovered in Europe. The discovery of the painted caves in France and Spain was treated initially with disdain by the archaeologists and art historians. But, further discoveries aroused the interest of a good many researchers. Among the pioneers rock art studies in Europe, Alcalde del Rio, Obermaier, Abby Henry Breuil and the most notably Andre Leroi Gourhan were those who introduced different methods of studying and interpreting rock art images. In Saudi Arabia Emmanual Anati wrote four books (1964, 1974) on the rock art of Central Arabia and attempted to date, analyzed, and interpret the rock art of central and southern parts of the Kingdom. Although, Anati's dating and analysis of rock art was later proved to be wrong (Khan 1993, Bednarik and Khan 2001), his contribution as a pioneer introducer of Saudi rock art will always be appreciated. First systematic, analytical and synthetic study of rock art of Saudi Arabia was conducted by Dr. Khan, who produced a Doctoral thesis (1989) on the rock art of northern Saudi Arabia.

ORIGIN OF ROCK ART

It is not possible to suggest with satisfactory precision when the ancient people first started image making. It is said that the early Aurignacian (c.32,000 to 26,000 BP) engravings and paintings in outlines only and with no interior details, are perhaps the oldest examples of rock art (Whitney Davis 1986:193). Aurignacian representational images, engravings or painted on lime stone blocks are located in rock shelter sites near Les Eyzies, Dopr dogne region of France. Ther Magdelenian rock art c.17,000 - 15,000 BP. located as paintings and engravings in the caves of France and Spain and

elsewhere in Europe gives an impression of a variety and high quality of sophistication in its contents, style and technique. The caves of Altimara and Lauscax have attracted the attention of all the world due to their colorful figures and high skill of representational art.

We do not know when and how image making was originated. Perhaps rock art originated in the chance discovery of the representational use of lines, marks and dots etc., which in the beginning need not and might not have a representational similarity to any object. If the discovery of image making was just by chance, created by random drawing of lines, later it changed into an intentional and purposeful activity and subsequently became a vital source of earliest communication. The person sitting on a rock looking at the animals of his environment tempted to draw them without any intention and purpose but just as a leisure activity, which later developed and became part of the society thus various artists were created who involved themselves in artistic activities. There is no evidence to say in which part of the world first art was first created, perhaps it was created almost simultaneously in various regions of the world just like the stone tools which show striking similarity both in their creation and use in different parts of the world.

The origin of rock art in Saudi Arabia may be clarified by future work, but at present the evidence is that it first occurred in the late Upper or early Epi-palaeolithic period between c.15,000 - 9,000 BC. This dating is based on the petroglyphs associated with the Epi-Palaeolithic sites located at Shuwaymis, Kilwa, Tabuk and Khayber where stone objects of typical upper and Epi-Palaeolithic types are located in the vicinity of rock art sites. The petroglyphs on these sites show a similar degree of weathering, erosion, and desert varnish or patina. All the three sites contain large figures of some unidentified beasts outlined by deep, sparse, irregular and rough grooves, apparently hammered directly on the rock surface by some pointed

object. These figures are almost abstract, the crudity of their forms could simply be because the artists were unskilled or untrained, but familiarity with image making seems indicated by the completeness of the outlines and the figure.

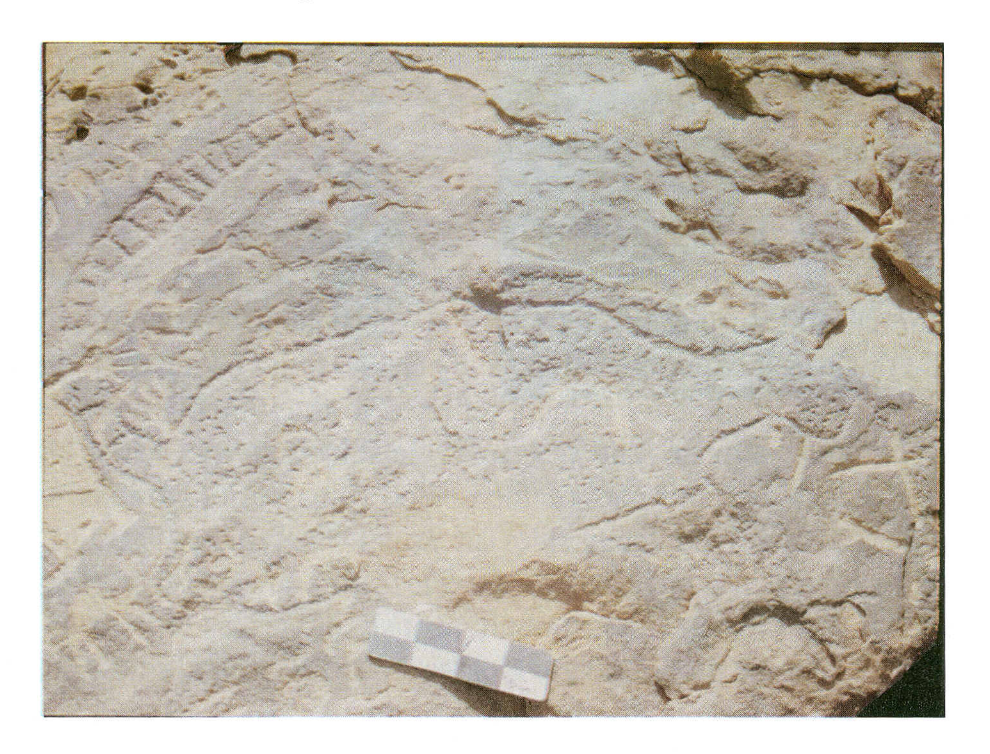


Figure 25. Earliest example of rock art from Kilwa, northern region

CHAPTER 2

DEFINITIONS AND TERMINOLOGY

During this century, and particularly in the last two decades, rock art studies have become important for the archaeological and anthropological studies of prehistoric communities. Rock art has become a valuable tool in the understanding of cultural, social and religious values of prehistoric societies. A number of definitions have been proposed on the basis of a technical terminology for describing rock art.

The art could be naturalistic, schematized or abstract.

NATURALISM OR REALISM

A figure is called "naturalistic" or realistic when it is portrayed with detailed realistic physical and morphological features of the original model/object. It is obvious that nature cannot be reproduced in its originality and no art can be truly naturalistic or realistic " all representations correspond to the mental model of the artists" (Gombrich 1973:196). Ucko and Rosenfield (1967: 48) have stressed that there is a continuous stylization in prehistoric art, and that "it is an oversimplification to categorize prehistoric art as naturalistic.

Naturalism is applied to those figures that are depicted with detailed physical features of both human and animal representations and to distinguished them with schematized and abstract images.



Figure 26. Naturalistic human figure located at *Jubbah, northern region.*

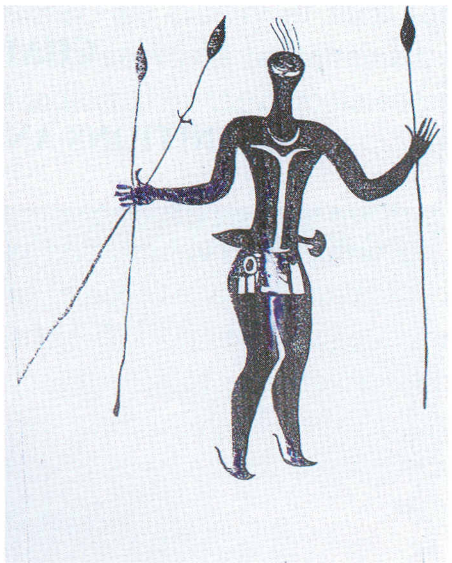


Figure 27. Realiistic physical details are *Skillfully depicted on the human body.*

As no artist can reproduce an object or model in its natural form, the term therefore usually used to differentiate figure on which physical morphological features are depicted with more accuracy as compared to schematic representations on which either physical features are not shown in realistic way or are schematized and shown partially.

SCHEMATIZATION

Schematization is a process involving simplification and reduction of traits and details of an object, but which at the same time maintains the identity of the original object. Most of the rock art in Saudi Arabia is schematized in which artists usually omits, simplify, or reduced certain canons or traits to produce schematized figures according to the intention and motivation of the artist.

Thus schematization involves reduction or simplification of complex ideas to a simple form. In other words a figure becomes schematized when it reproduces the general characteristics of the model by reducing it to its essential traits.

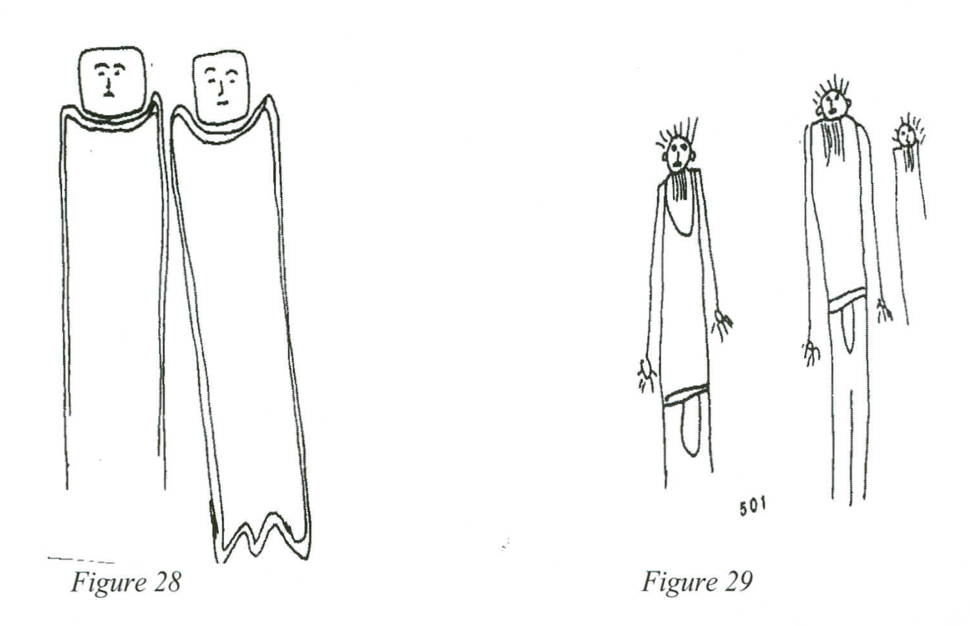


Figure 28 *Figure 29*

Schematic anthropomorphic representations

A schematic representation of an object or model is the final product of a long process of schematization, in which figures become linear and are depicted with great economy of means and time. Such figures are created by the artist as symbolic and communicative and embodied in them are meaning and abstract ideas. Thus, the artist used minimum efforts and conveys the ideas with schematic images.



Figure 30. Stick figures from Wadi Damm, northwestern region.

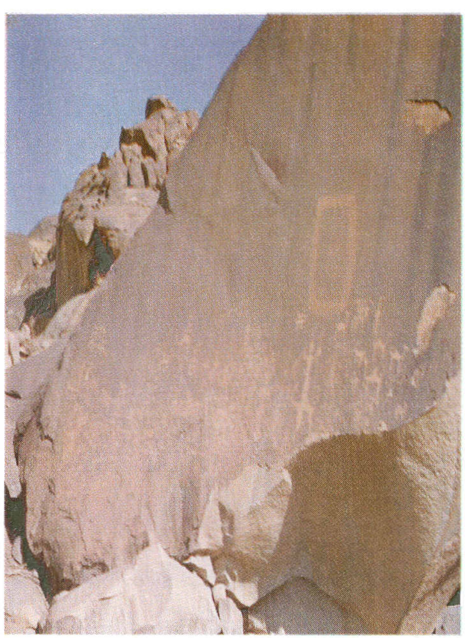


Figure 31. Human and animal stick figure, from Bisha, southern region.

In a schematic figure basic human and animal traits are reduced to the simplest possible lines. Thus, a linear or stick human figure is a "schematic" representation that cannot be further simplified without loosing its identifiable traits.

In Saudi Arabian rock art stick like human and animal figures appeared in Chalcolithic but became common in the Bronze and early Iron age. With the exception of camel no naturalistic or realistic human and animal figures were depicted in the late Bronze and Iron age, it means the artist in these cultural period were not interested in portraying the realistic images of their models but were meant to represent symbolic motifs that may reveal certain meanings known and understood by the people of that particular society and that cultural period.

ABSTRACT ART

Relationship between an object and associated concept developed by an artist in his mind and displayed in the form of art is called "Abstract art". Thus abstraction is the outcome of the mental power of he artist that he attributes to a particular object or model. As a mater of fact abstract art is a symbolic art in which artist attributes some ideas and thoughtful meanings in the form of abstract images and expresses them on his object or model.



Figure 32. Abstraction in art



Figure 33. Abstraction and exaggeration in art.

Abstraction in art is not only the modern way of communicating artist's ideas and thoughts but was invented long ago in pre-historic times. These abstract images of human like forms and rounded and bird like faces (figure 32) with other associated motifs together constitute a composition of abstract ideas and a message that cannot be understood without the interpretation of the artist, as we do have in our modern abstract art. However, it cannot be a leisure

activity of the prehistoric artist but an intentional work of communicating a story or a message by abstract images. Located at Shuwaymis and could be tentatively attributed to Neolithic period 6,000 to 5,500 B.C.

Abstraction is the style of art characterized by a high degree of emphasize on the expressive qualities of artist's ideas and thoughts. Abstraction is deviation from the aesthetic and natural art. In abstraction artist expresses his ideology, thoughts and world vision by strange, symbolic and highly schematic representations.

Abstraction is certainly not a modern style of art it was already practiced since unknown times. In Saudi Arabian rock art abstract images are found in the Neolithic (6,000-5,500 B.C.) and in all historic and prehistoric cultural periods.

STYLE

Each artist has his own perspective of looking at things and portraying them according to his outlook and perception. Sometimes an artist reduces, adds or modifies certain traits, either to secure the identification of his work of art or for other reasons. This specific way of portraying objects is the "style" of that particular artist. In prehistoric rock art of Saudi Arabia, some decorative patterns are restricted to certain specific regions or territories, while these stylized differences can be used to distinguish or recognize the work of a particular social group or the artist of the same school of thoughts. Schapiro defines that " by style is meant the constant form and - sometimes the constant element, qualities and expressions in the art of an individual or group" (1953:287). Thus in the art of prehistoric societies style may be considered as the manifestation of a culture as a whole, the visible sign of its unity. Wright suggests that style can be

used as a possible means to distinguish the work of art " belonging to a specific tradition, related to a region, period or time and possible culture" (1977:`111).

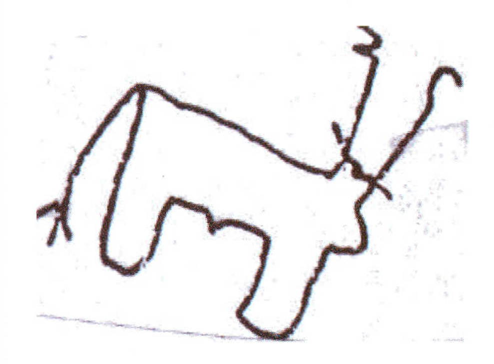


Figure 34. Style 1

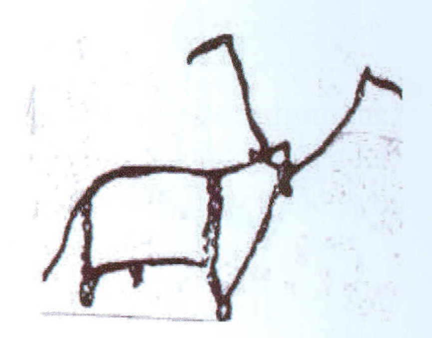


Figure 35. Style II

In figure 33. the upper ends of the horns of the ox are modified and deliberately twisted. The conical face, long twisted horns, and the horizontal line representing both forehead and the ears are the main characteristics of this style.

Figure 34. represents another style in which the horns are roughly "V" shaped, bent sharply at the top in perpendicular shape. The shape of the face and the body also differs from that of style 1.

The two figures 33. and 34. represent two different styles and were probably depicted by two different artists.

TRAIT

The term trait is used to refer to a prominently visible character in art representations. Examples are expression of movement,

protruding buttocks, twisted or decorative horns of oxen, and oval headed human figures etc. A trait is thus a distinguishing quality of any object or model.

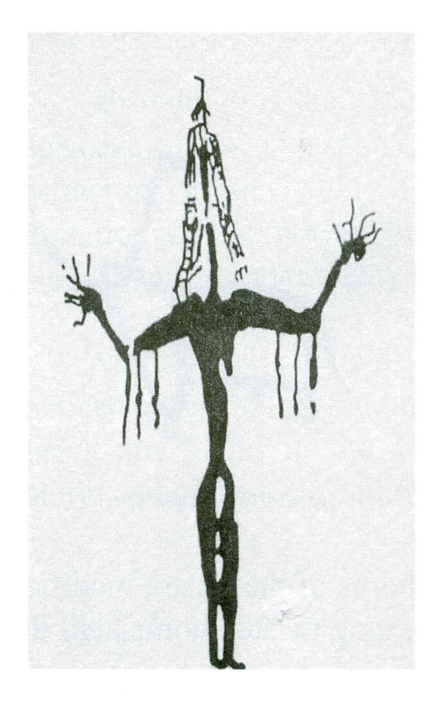


Figure 36. Long neck, thin waist, and open palms are the main traits of this figure.



Figure 37. Protruding buttocks, and long thin body, are the main traits on this female figure.

PERSPECTIVE

The animal and human figures in the Arabian rock art are usually depicted in true profile. In the case of animals horns and legs are portrayed in many different ways. In New English dictionary perspective is said to be " the art of portraying/ representing solid objects on a place exactly as regards position, shape and dimensions, as the objects themselves appear to the eye at a particular point. The artist looks at his model from different angles and portrays them in the

manner in which they appear to him. Breuil (1952); Leroi Gourhan (1990); C.Barriere (1976) and others have suggested many definitions for European Paleolithic art, only those applicable to Saudi Arabia rock art are defined here.

SIMPLE PROFILE

To portray a model in simple profile the subject is seen from the side and at the point parallel to it. The following figure represents a profile of a man, and an ox on which indicating a single horn and two side legs only.



Figure 38. Ox figure in profile, side posture is shown with two legs and one horn only.



Figure 39. Human figure in profile.

BIANGULAR DIRECT OR TWISTED PERSPECTIVE

Leroi-Gourhan used the term Biangular Direct Perspective when " the subject is viewed alternatively from the front and in profile and different parts can be flattened out through 90 degrees", a man with a front facing body and the face in profile or a bison (or an ox) with a body in profile and the horns from the front (1980:320). This corresponds to Breuil's "Twisted Perspective" and Barriere's "Turned Perspective" (1976:34).



Figure 40. Ox in biangular direct perspective.

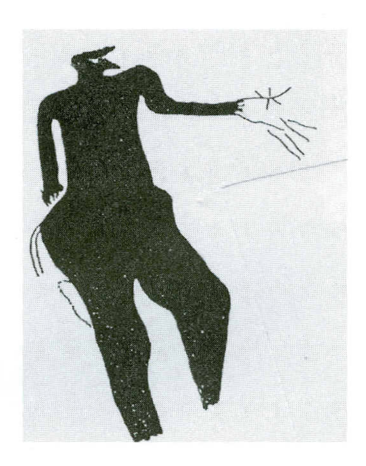


Figure 41. Biangular direct perspective.

Barriers (1976) further divided such perspective into a "Close Perspective", when the space between the horns is in a continuous line following either the base of horns or the line of the skull; and "Open Outline" when his same space is empty, one of the horn being joined to the neck/ or the back, the other joining the forehead, and both diverging at different angles.

BIANGULAR OBLIQUE PERSPECTIVE

Leroi-Gourhan used the term "Biangular Oblique Perspective" to describe the flattening out of an object in the order of 45 degrees (1980:22). This corresponds to Breuil's "Semi Twisted Perspective" (1950:106), which is also sometimes called "Pseudo-Perspective", in which the four legs and the horns and ears of an animal are portrayed in full.



Figure 42. Biangular Oblique Perspective open horns.



Figure 43. Biangular Oblique Perspective with closed horns.

SYMBOLS

A symbol is used to refer to something that stands for, and represents something else, or invest objects with imaginative meaning e.g. the heart is a symbols of love; Cross is the symbol of Christianity; and white dove is the symbol of peace. In art, a symbol is the artist's self-creation without any immediately clear resemblance to the real object.



Figure 44. Tribal symbols associated with camel riders indicating their association with a specific tribe.

Any particular symbol, such as a snake, a circle, a triangle, a cup mark or a cluster of pecked marks in a work of art, may have a wide range of meanings such as a lake, an animal, a love mark, an enemy or ethnic symbol etc. The meaning of a symbol remains restricted to a particular culture or society. Wusum of tribes among Arab Bedouins is an excellent example of symbols which are being used for centuries and are still in use.

SIGNS

In Addition to human and animal figures in prehistoric rock art, there exist certain 'signs' which range from large, complex designs to simple dots, vertical strokes, grids and pecked marks around or near certain objects. It is extremely difficult to understand what these signs signify, but it is evident that they co-exist with other figures and were purposefully associated with them.

Like our modern traffic signs, the sings found in prehistoric rock art may have some meaning but we cannot understand them. The people who created them and used them could only understand these signs incorporated in rock art in association with other figures.

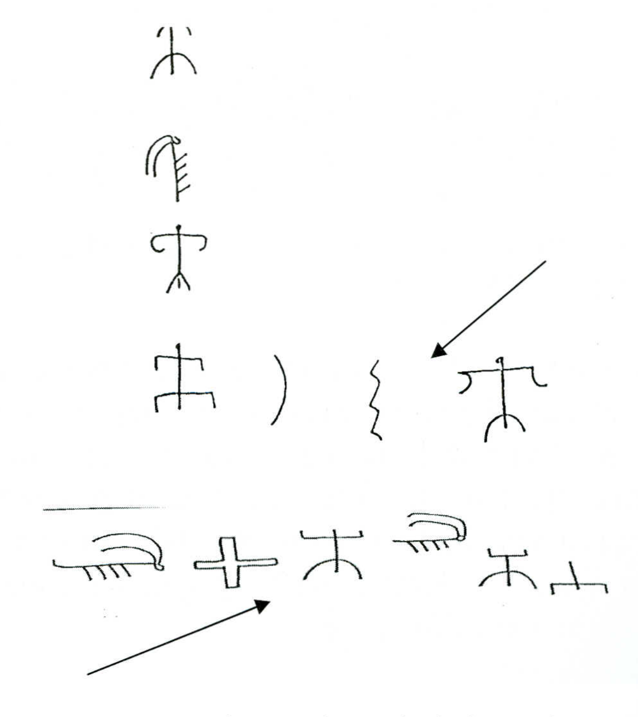


Figure 45. Sign and symbols in rock art

JUXTAPOSITION

The figures on a rock art are depicted according to the space available to the artist. Figures depicted close to each other showing an association with each other are 'closely juxtaposed', while those with a space in between but are part of eh same panel are 'widely juxtaposed'.

Juxtaposition of figures shows artist's capability to use the available space, the failure of which may result in overlapping or superimpositions. Juxtaposition could be intentional to show the synchronization of figures or could be unintentional to accommodate the figures in the available space.



Figure 46. Horse and its baby are juxtaposed to use the available space.



Figure 47. images are juxtaposed to face each other showing association and relationship with each other.

SUPERIMPOSITION

In certain cases, on the same rock various figures are depicted on top of earlier figures. It is "superimposition". A chronological sequence is thus established and different phases of rock art could be recognized by establishing the order of succession of different figures, believing them to have been created at different times.



Figure 48. Horse figure is superimposed on earlier half bird half human figure.

Although, in case of painted figures it is difficult to differentiate the time period between one and the other successive phase but in the case of petroglyphs it is possible to differentiate various phases on the basis of difference in patina, the older figure will be much darker as compared to the later additions.



Figure 49. An example of intentional superimposition. located at Jabal al-Kaukab, Najran

In Saudi Arabian rock art sometimes the superimpositions and overlapping apparently seems to be intentional. It is found that even if the space is available on the same rock, the artist superimposed figures on earlier figures. Thus, superimposition is mostly intentional perhaps the artist chose to depict his figures on the earlier ones to show some kind of association with his ancestors. However, superimpositions help the researcher to find various phases of rock art.

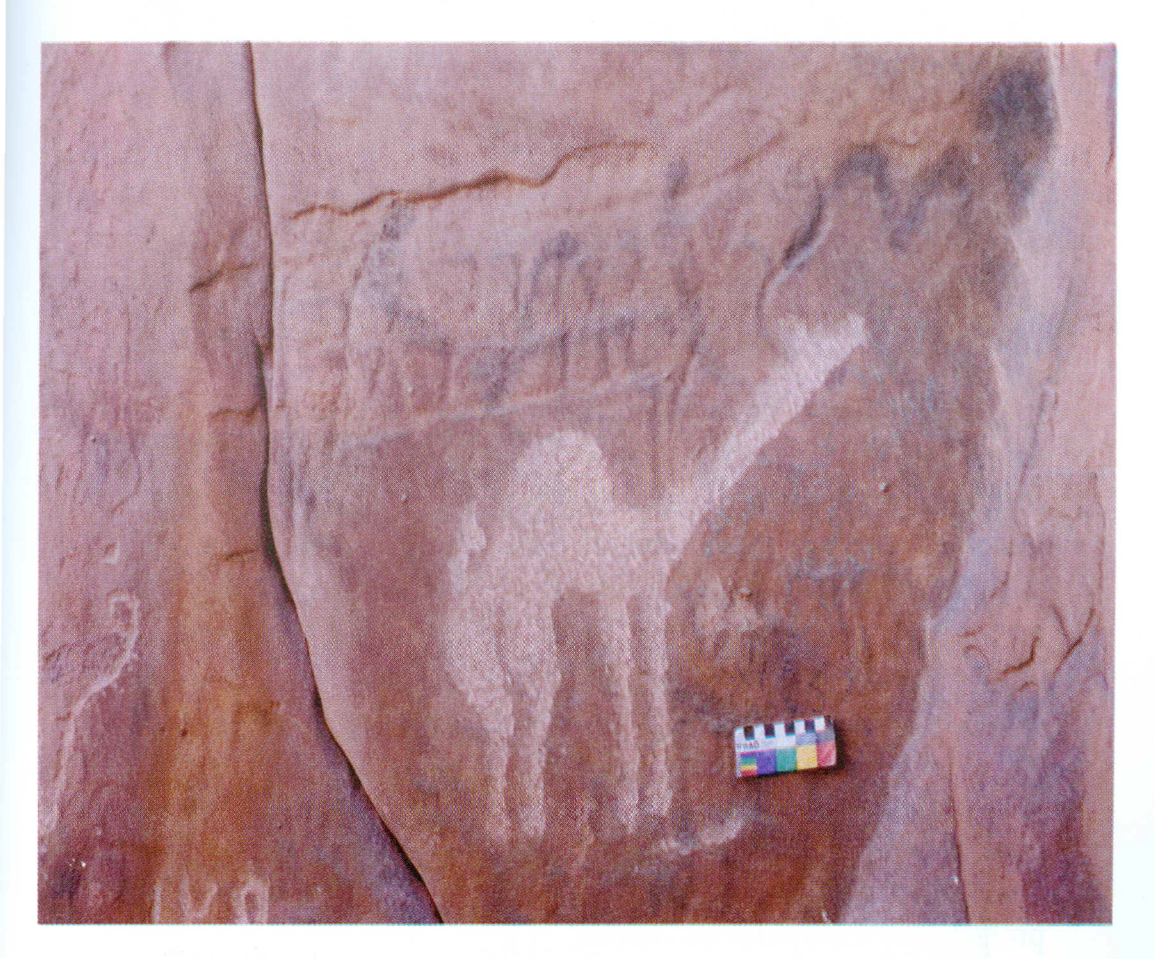


Figure 50. Camel figure is overlapping earlier ox representation, two phases of rock art can be recognized easily.

The camel is overlapping the front legs of the ox figure. Overlapping could be intentional to show association with the previous work of art or could be due to the availability of limited space. Two different animals from two different environments are represented here. There is possibly a difference of 4,000 – 3,000 years between the two figures.

ANIMATION

The movement and dynamism shown on the animal figures in the rock art is called ‘animation’. In Saudi Arabian rock art animation is a rarity, but in some cases movement and dynamism is indicated on some animals. Animation is the only way to indicate before, during and an after expression of an animal.

It is difficult to express animation through body contours. Animation is usually indicated through movement of tails, neck or legs. A galloping horse, an ox looking right, left or upward and the tail in different positions, deer or Oryx in running attitude and dogs attacking animals are the most common action of movement and motion shown in the prehistoric rock art of Saudi Arabia.



Figure 51 Camel in motion as if running

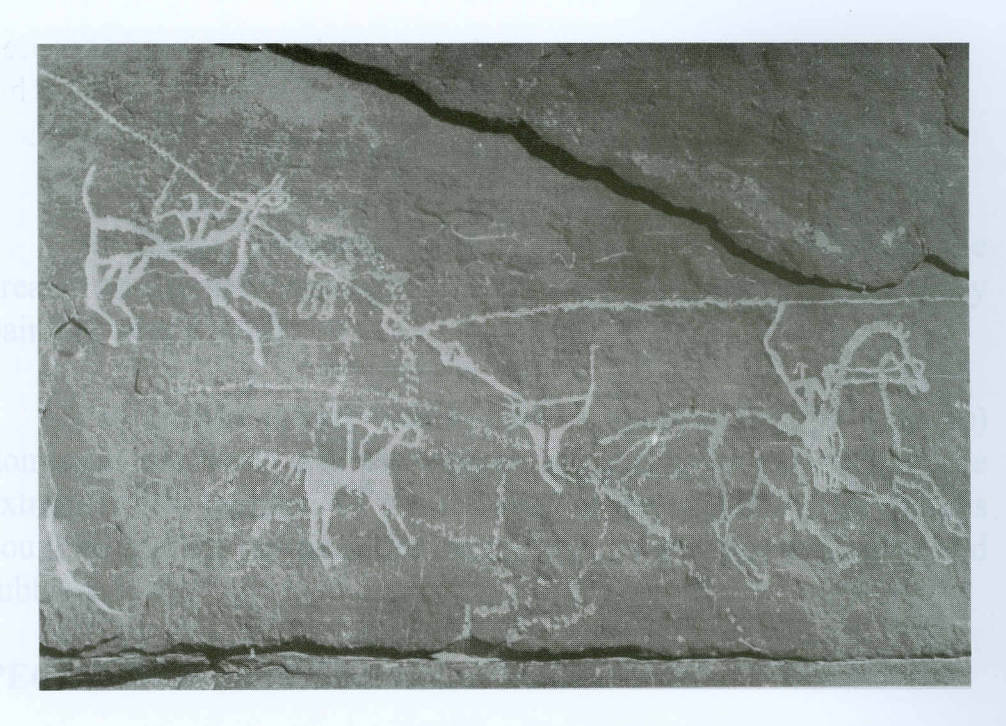


Figure 52. Horses in motion and in action with their riders



Some time figures and inscriptions are engraved on easily accessible rocks, and some time on hardly reachable locations.

CHAPTER 3

TECHNIQUE OF EXECUTION

An image, representational or non representational could be created on a rock by removing the fragments of the rock surface or by painting with a brush.

Petroglyphs (Greek word: petro = rock and glyph = carve) dominate the rock art assemblage of Saudi Arabia. There are extremely low numbers of painted sites in the Kingdom. Petroglyphs could be created on the rocks by pecking, engraving, scratching and rubbing.

PECKING

Pecks are created on a rock surface by hammering it with some pointed object. This could be done by "direct" hammering the rock surface, creating rough, irregular and wide pecking marks or groves.

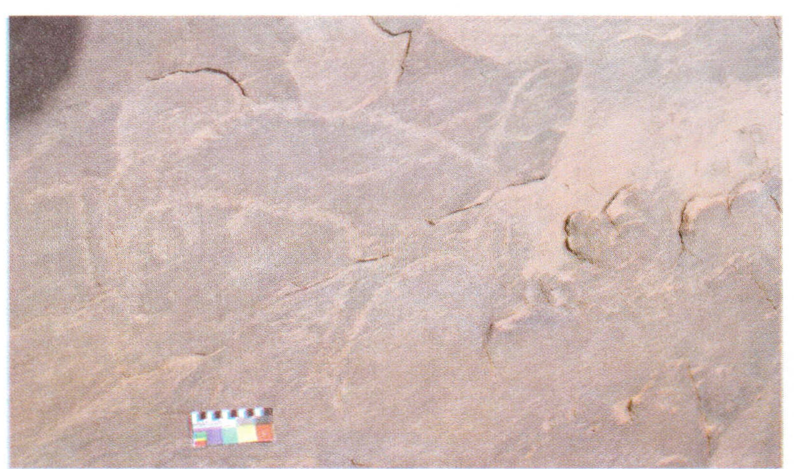


Figure 53a. An early work of art created by direct hammering the rock surface.



Figure 53 B. Pecked hand print from Tabuk. The hand is created by rough, large and irregular peck marks. Earliest rock art was usually depicted by direct rough, and deep pecking the rock surface.

'Indirect' pecks are created by controlled blow of the hammering tool through a pointed chisel. In this method the grooves are small, deep, regular and well arranged.

ENGRAVING

The rock surface is engraved by some hard pointed object to create filliform images. In such case only outlines of figures are made.



Figure 54. A filliform image created by deep engraving the rock.

RUBBING / ABRADING

Sometimes a rock surface is abraded or rubbed by an elongated object to create images on darkly patinated rock surface. In such cases, the surface patina is removed by rubbing the rock surface and figures are created in contrast to the original dark surface.



Figure 55. The ox figure and circular motifs are created by scratching and rubbing the dark surface of the rock, no pecking or engraving is involved. Located at northwest of Tabuk.

PAINTING

In Saudi Arabia very few painted rock art sites are located. The paint used is usually dark brown monochrome ochre. Most of the painted sites are located in Bisha, Khamis Mushayat and Baha area in southwestern parts of the country, a few painted sites are also located in northwest of Tabuk.

Perhaps, there were more painted sites in Arabia but they might have vanished by rain, extreme heat and swind storms.



Figure 56. A painted ox figure located near Jabal Lawz, northwest of Tabuk.

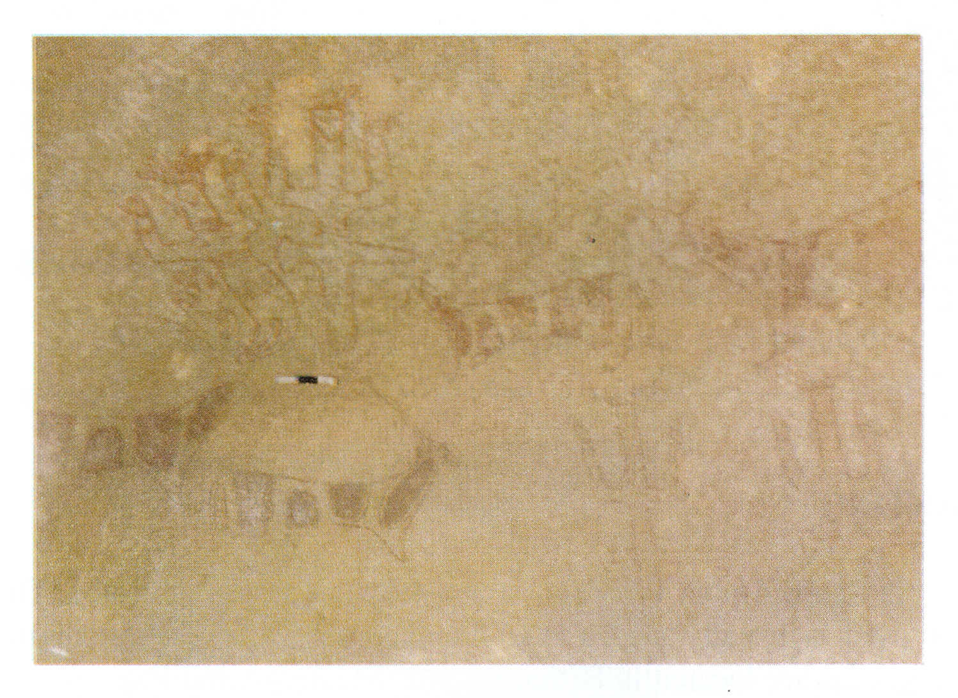


Figure54. Painted masked human figures and animals located at al-Mikhwa, Baha area.

Usually red color is made from the local reddish sandstone rocks by crushing and grinding them into power form, than it is mixed with animal fat and water. The lack of painted sites in Saudi Arabia is

due to harsh dry climate and wind erosion that removed the paint from rock surface. Thus, only those painted sites are still preserved which are located under rock shelters or in the caves.



Figure 55. Painted human and animal figures near Jabal al-Lawz, Tabuk.

CHAPTER 4

RECORDING ROCK ART SITES

Once a site is located its geographical location is marked on the map and coordinates are carefully noted.

In Saudi Arabia the figures are usually pecked or engraved. Such types of figures are called petroglyphs. In several cases the figures are covered with sand particles and dust, the pecked marks on the rocks are filled with sand and figures are not clearly visible. When the figures were first made several hundred or thousand years ago, they were sharp and clearly visible, but due to weathering and erosion the figures are not in their original state of preservation and hence in several cases the color of the lines is now not different from that of the surrounding rock. Some figures are almost invisible at first sight, thus older figures are dark colored and are not easily visible, while the newer figures are lightly patinated and can be seen easily.

Once the site is marked on the map, one should look at the surrounding of the site carefully. What kind of vegetation surrounds the site? What type of animals might be living in the area? What was the source of water available for the people who lived there and used the rocks or hills around them to create human and animal images? Note why the artist selected that particular rock or hill surface for his art work. Is there any rock shelter or a cave nearby? Could that be a camping site? You should see around the site to find cultural objects like stone tools, pottery shreds, or stone structures etc. This could help in dating the rock art site in relations to the located artifacts.

Of course, in such cases the dating will be relative and tentative. Once you got answers to your questions it will be easy for you to

understand the significant of the site and the contents of rock art compositions.

A field book can be made on the basis of the following information:

INVENTROY OF ROCK ART SITES

Name of site ....

Site number..

Location..

Latitudes..............................Longitudes..................................

Town.................Village ....District..............................

Ownership......Government land ....Private Property..............

Area of site: Length..............Width..

Type of site: Cave......Boulder.......Hill......Buried........Open area.....

Rock art face............North.........South...........West........East......

Horizontal........................Vertical..

Topography..
Hill top..............Wadi.....................Desert area.....................

Type of rock...... Basalt.......Sandstone.......Granite.........Other.......

Rock surface: ......Smooth......Rough......Broken........Varnished........

Type of art....Pecked........Engraved........Scratched........Painted...........

Inventory of rock art assemblage:

Human cattle camel deer goat dogs lizards Wasum weapons

Name of Registrar……………….

Date……………………………...

FIELD WORK

Field work starts with the location of site. It's proper location and marking on the map is most essential.

Each rock art site usually consists of several rock art panels depicted on several rocks or hill surface in the same vicinity. Each panel should be recorded and studied independently. A panel is a composition of various figures placed together. Various panels and rock art compositions could be located on the same rock or hill surface or in a cave. These different panels may be the work of the same artist or different artists, bit in most cases different panels and compositions located on the same site could be work of different artists. Thus each panel must be recorded separately and a number should be allotted to each individual composition or panel.

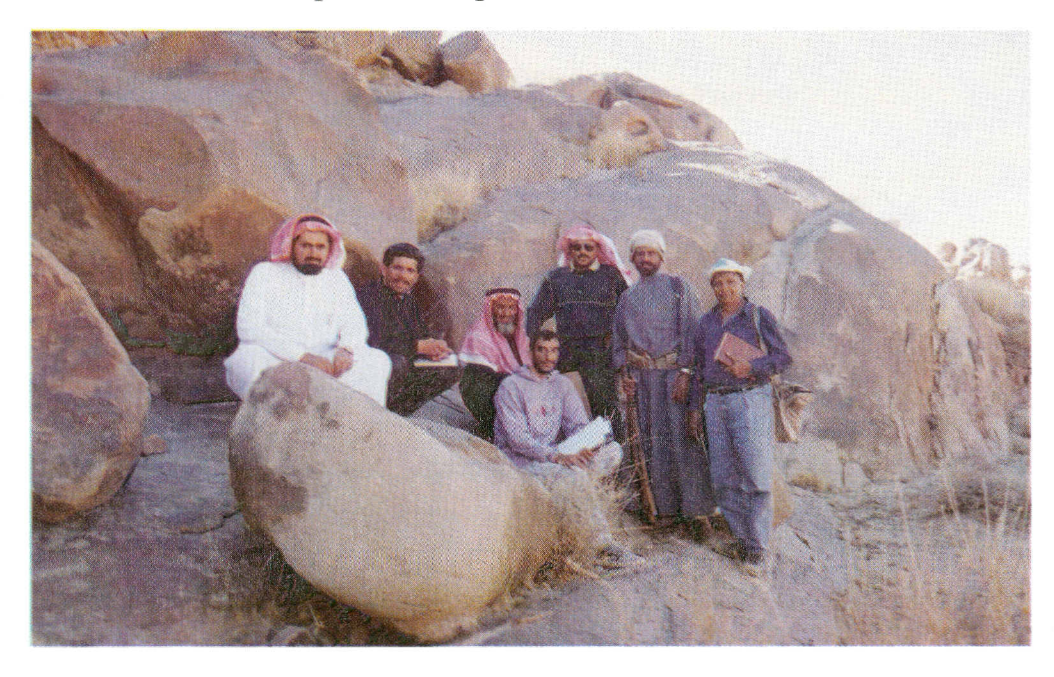


Figure 56. A team of archeologists from the Deputy Ministry of Antiquities and the Museums in the filed while surveying and documenting rock art.

CLEANING THE ROCK SURFACE

Usually the petroglyphs carved on a rock are covered with soil, sand granules and dust. The rock surface must be cleaned first by brush and then by water. No chemical should be used and no chalking on the figures should be allowed.

PHOTOGRAPHY

The figures should be photographed in their entirety. First each panel or composition of animal should be photographed then attention should be given to more prominent individual figures. The best time being the morning or evening when sun rays fall obliquely on the rocks. Several photographs from different angles and in different sun light should be taken. Colored prints by digital camera and black and white photographs should be taken.

The inventory of photographs must be prepared carefully. Each print, roll and site number must be registered. These days digital cameras are the best for photography, while video film could also be prepared if needed.

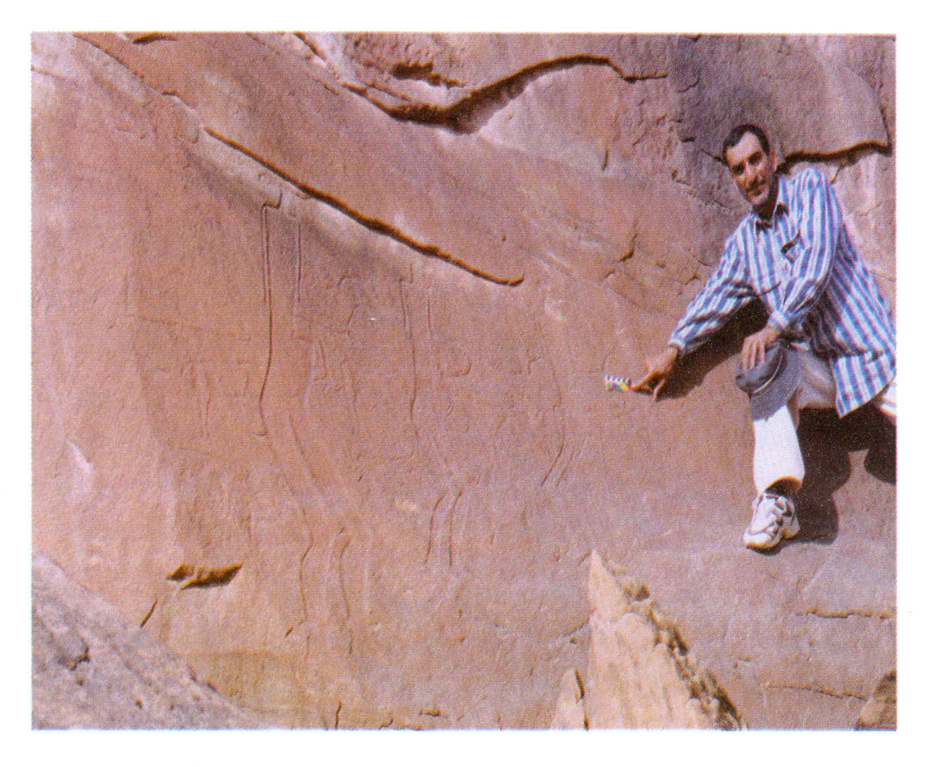


Figure 57. Photographing and recording petroglyphs in the field.

Scale must be used and placed in proper place avoiding putting it on the figures. International Federation of Rock Art (IFRAO) has issued a scale that is now used by rock art researchers all over the world.

TRACINGS

Tracing of the carved surface, made on transparent plastic sheets is the most important part of the study. By tracing each pecked mark, each figure and each sign gives the researcher exact impression of how the ancient artist created those images.

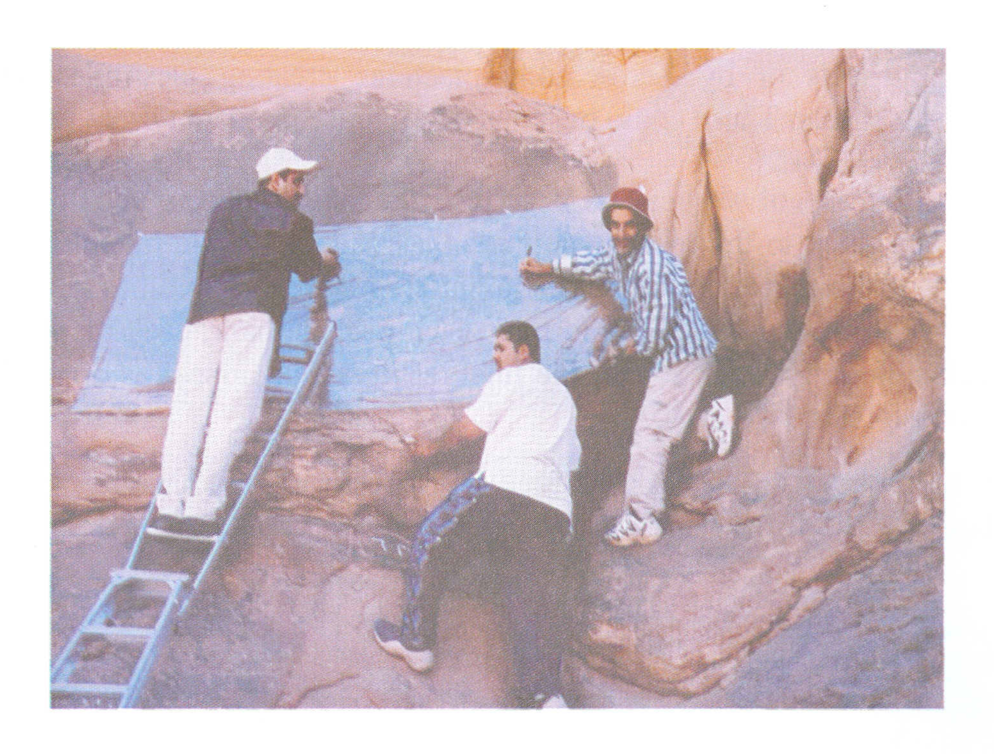


Figure 58. Tracing the petroglyphs on a plastic sheet.

The plastic sheets used should not be too thick. A marker or pen with temporary ink, which could be removed by cotton/wool pad, should be used, Natural cracks, fractures, or other natural features on the rock should also be traced but with pens of different colors. Similarly, superimpositions and overlapping should be recorded, either with different designs or with different colors.

To trace large compositions it is necessary to use more than one sheet. A standard format sheet of 120 x 90 cm. or 60 x 90 cm. should be used. A strip or 2 cm. per side is left to overlap any adjoining tracings. Several sheets could be used to trace a large panel. Each sheet should contain a serial number, the site number and the number of rock art panel or composition. The tracings of these sheets combined together could be later transformed by retracing them on

plastic sheets or by Xerox copy machine, creating facsimiles on polestar sheets. These could be hanged in a museum display.

In case of vertical rock surface the plastic sheets should be properly stick to the rock by strong adhesive tape. While tracing, the point of the pen must be held straight to draw exact outlines of the images. Care must be taken to trace each pecked mark, each mark or each sign on the rock so that the final result should appear as original as possible.

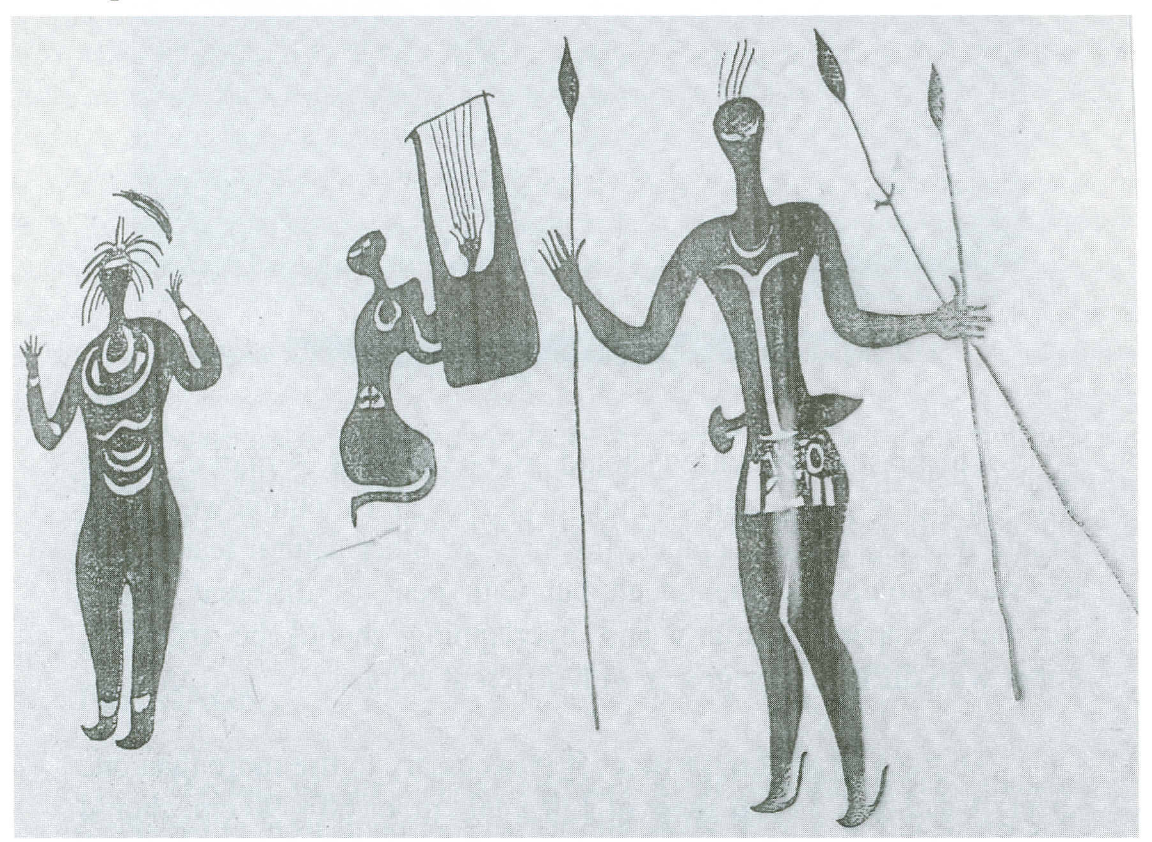


Figure 59. Tracings may bring results like this panel that shows are details of the figures and could be displayed in the form of posters or large pictures in the museum. The panel is located in Najran area, southern region of Saudi Arabia.

CHAPTER 5

DESCRIBING ROCKART SITES

How to describe a Rock Art panel

Before Describing a rock art panel, each figure should be numbered for ready reference in he discussion.

The rock art panel chosen here as "type study" is located in Wadi Damm, northwest of the city of Tabuk, northwestern Saudi Arabia (site 1).

The panel under discussion is located on a small isolated rock situated at the southern end of he sandstone outcrops overlooking the valley. The horizontal surface of the rock that contains petroglyphs is 2 x 5 m wide and about 2 m. high above the ground. The largest and the most distinguished figure, is that of a meandering representation fig.1 of about 2m. long, and 0.5 to 1 cm. wide at its widest part. It is placed so as to bisect the rock into tow sections. Part of it is superimposed on an ox fig.4, which is situated in the middle of the panel. The large meandering fig.1 is wavy shaped, thin and tapering at one end, and gradually widening at its other end, forming a serpentine like shape. It's southern end terminates in a heavily weathered and badly eroded rock surface.



Figure 60 Site no.1

The two cattle fig. 2 and 3 are located a little apart from the meandering figure. These are executed in Biangular Direct Perspective (BDP) and withy closed outlines. The middle third body of ox 3 is marked off by parallel vertical lines delimit a squarish array filled in with oval shaped dots. The face is oval shaped and horns are small and backwardly curved. Another outlined ox fig.5 is situated close to the meandering figure and is depicted in Biangular Direct Perspective and with closed outlines. The horns are curved forward in front of the face in semicircular form. The ox 4 on which the meandering figure is superimposed is similar in style to the previous cattle figs. 3 and 4 but differ in having curved/way line running from the face through the shoulders and terminating in the body.

Figs. 6 and 7 appear to be the meandering lines. The large one fig.6 lies close to the serpentine figure. Besides it is an ibex fig. 10 carved in Biangular Direct Perspective and facing an adjacent dog fig. 11. In contrast to all the other figures, the ibex and the dog are fully pecked.

An outlined caprine fig.8, in Biangular Oblique Perspective, and an incomplete unidentified animal fig. 9 are the only figures of the

panel which are located east of the serpentine figure. Fig. 12 is a unique and highly stylized representation of what appears to be a caprine. Fig. 19 is a line drawn on the back of caprine fig. 8, We do not know what could be is purpose.

The schematized human figure 15 is shown as if holding a cord tied to a pair of dogs, figs.13 and 14, is located at the northern end of the rock near the head of the serpentine figure. Besides them is juxtaposed an outlined equine fig 16 (donkey) executed in Biangular Oblique Perspective and with open outlines (that is with an open space between the tow ears). It's legs are tied with accord. The pair of dogs, human figures and eh equine are all depicted skillfully by small, regular and systematically arranged deep grooves. They are also identical in patina to each other but differ from the rest of the figures, and hence represent a separate and independent unit of figures, which is probably a later addition on the rock. Figures 17 and 18 are two small lines drawn in between the human figure and the equine. They are identical in patina to the group of dogs and the donkey.

HOW TO IDENTIFY VARIOUS PHASES OF ROCK ART

In case where the rock art panel is created by the same artist and at the same time, the technique of execution and the patina of all the figures remain identical. But in Saudi Arabian rock art there was a tradition of using the same rock by several artists who preferred to depict their figures either on the nearby empty space, or sometimes even superimposed on earlier images.

As a first step, before the analysis and interpretation of a rock art composition, it is necessary to identify various phase. On the rock art panel discussed above the following phases could be recognized:

(1) Outlined cattle figures with forward and backwardly curved horns figs. 2,3,4,and 5. These are darkly patinated as compared to all other figures of the panel also are badly weathered and eroded.

(2) Fully pecked ibex 11, dog 10, the large serpentine fig.1 and the duck shaped meandering fig.10 represent phase 2. This unit of figures is identical in patina, contains similar grooves and pecking marks and is lightly patinated as compared to the figures of phase 1.

(3) The outlined caprine figs. 8, 9, 12 and motif 12 are depicted in different styles and are lightly patinated as compared to the figures of phase 1 and phase 2 which could be taken as a separate unit of figures of phase 3.

(4) The human figure with a pair of dogs, the equine (donkey) and he two motifs figs. 13, 14, 15 and 16 are separately located as an independent unit of figures and appear to be the newest addition on the rock. They constitute the most lightly patinated composition of figures of the panel and hence are placed in phase 4.

DESCRIPTION OF SITE 2 - (type study)

The site is located on the southwestern flank of Wadi Damm overlooking the valley towards east and a chain of sandstone outcrops at the northwest. It consists of a single panel located at about 2-3 kilometers southwest of site 1; nearby is a rock shelter and some stone structures covered with sand and only partially visible.

The small rock that contains the petroglyphs is about 1 x 3 meters in width and is heavily desert varnished. The panel contains a row of stick anthropomorphic representations executed in different forms and attitudes.

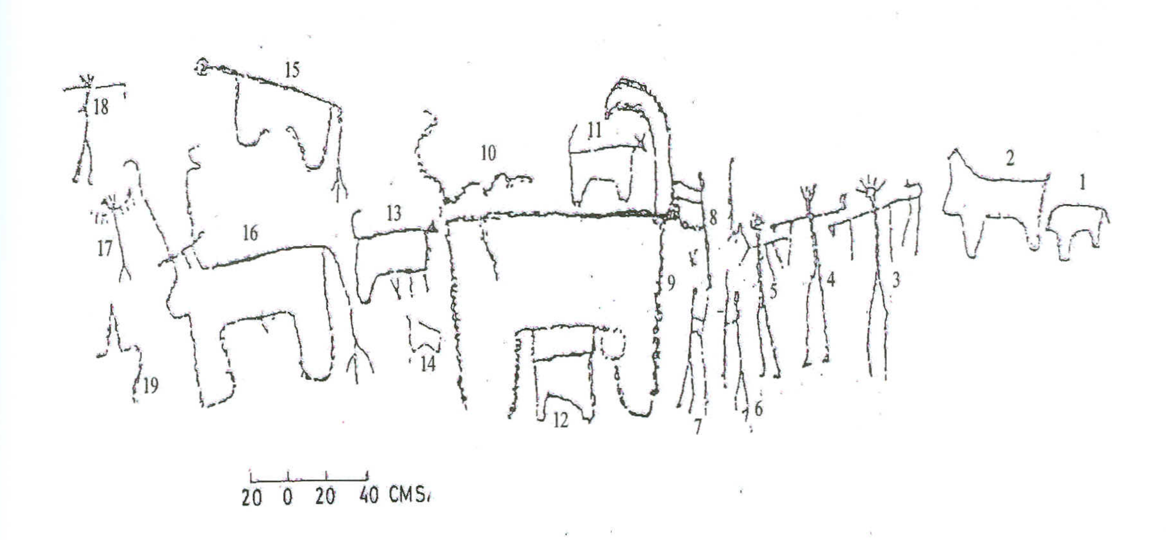


Figure 60.

All the figures are depicted in a row and are arranged in systematic and organized order with no superimpositions or overlapping. Starting from the northern end of the rock, there is a pair

of outlined dogs figs. 1 and 2 situated close to each other. In front of these is a row of three human stick figures. The first fig.3, is represented with full stretched arms, slightly open twisted legs, and holding an object in the right hand. It is also wearing a (feathered) headdress. Besides it is another human stick fig.4 depicted exactly in the same style, posture and attitude and represents similar traits to that of fig. 3. The third fig.5 is depicted without headdress. Its one arm is stretched and the other rose upward in which the person is shown holding a sword or dagger like object. A pair of human stick figures is located besides fig. 5, which are portrayed in profile with slightly twisted lower bodies fig.6 and 7, holding stick like objects in their stretched arms and facing each other. Just above them is another human stick fig.8 holding what is more likely the horns of a goat. This goat fig.9 is depicted in outline and is the largest and centrally placed figure of the panel. It is devoid of face or tail.

A meandering fig.10 is located behind the goat. Three outlined dogs are depicted in profile with triangular faces and backwardly raised tails. One of them fig. 11, is situated above the large goat, other Fig.12 below it, and the third fig.13 behind it. An outlined but incomplete figure 14 is situated just below the dog figure.



Figure 61. Photograph of site 2. Wadi Damm, northwest of Tabuk.

An interesting example of the use of space can be observed in figure 15, that of an outlined ox whose head is represented by a natural fracture of the rock. The artist has carved the figure in a way that the rock fracture has been utilized to represent the head of the ox.

An outlined ox fig. 16, depicted in biangular direct perspective and with open outlines, is the only animal figure of the panel which appears to have been depicted more carefully. It consists of a rectangular body, long tail, oval shaped face, and highly stylized horns rising upward as two straight lines and end at the top in twisted form. It is facing a human stick figure 17. It is shown with stretched arms, feathered headdress, and decorative ribbons hanging from the raised arms. Above it is another human stick figure with stretched arms and twisted body Fig.18, While, Fig. 19 is a meandering line located in front of the ox.

The common stylization, similarity in character, subject matter and the identical technique of execution provide enough evidence to assume that the panel was realized in one time and constitutes a single composite unit of figures.



Figure 62. General view of a rock art site in Najran area.

DATING ROCK ART

Dating of rock art is as yet problematic and there is no scientific and reliable source to date petroglyphs. In Saudi Arabia almost all rock art sites are open air with very little and sometimes even with no archaeological deposits or contextuality. The lack of archaeological evidence and stratified deposits related to prehistoric occupation is a major set back in dating rock art sites. However, the following scheme could be adopted to develop relative and tentative dating:

1. It may be assumed that the fauna depicted on the rocks by the prehistoric artist, represents the animals which were either present in that particular period or with which the artists were familiar. We may assume that an artist cannot draw animals with so much realistic physical details if he has not seen them or is not familiar with them.

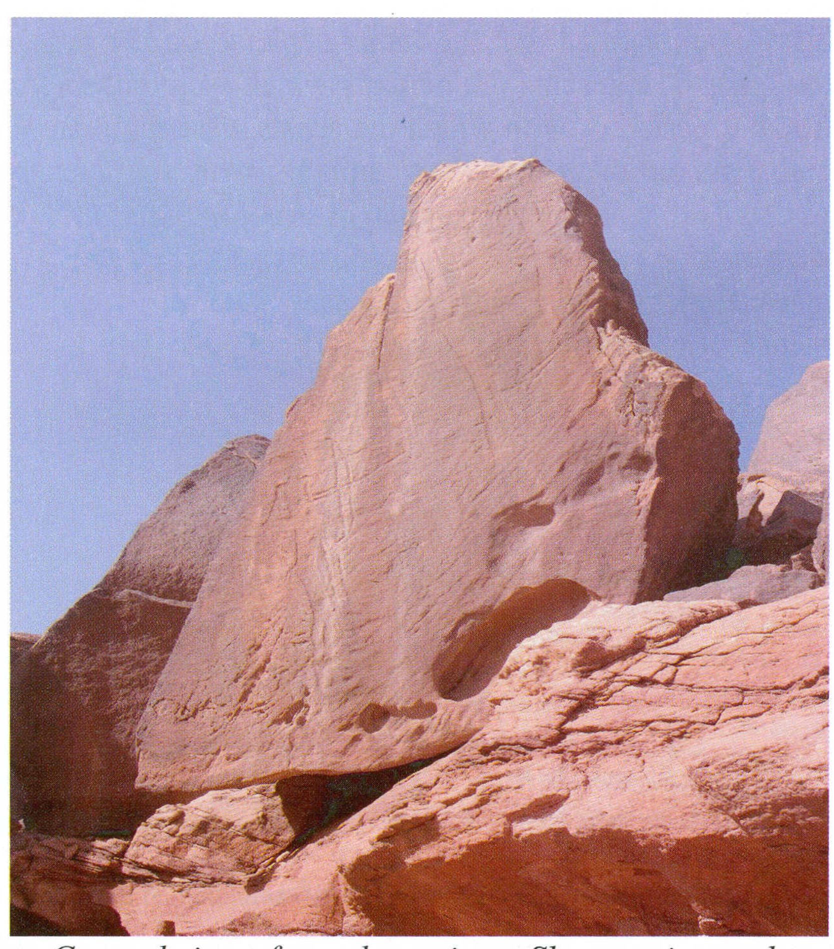
It is suggested that the appearance and disappearance of animals is the consequence of changing environment and climate. Thus the cattle in Arabia were present at a time when there was a cool and humid climate (during the Neolithic period c. 7,000-6,000 BC) and it disappeared when the climate became hot and dry (Bronze Age c. 2,500-2,000 BC). At this time camel appeared both inland and in rock art.

2. It may be assumed that the artists were living near rock art sites and Artifacts found on or near such sites were made or used by them. A correlation between the artifacts and the rock art apparently does exist. Thus by correlating the dated artifacts which are found repeatedly near similar rock art sites a relative and tentative chronology could be established.

3. Comparative study of similar rock art sites from neighboring regions such as Jordan, Sinai, Yemen etc. and results of excavations

from those regions in which petroglyphs similar to those of Saudi Arabia are found can be used as for dating.

4. Relative dating is achieved by locating cultural artifacts from the rock Art sites, by recognizing superimpositions, the difference in patina, the technique of execution that shows the difference in the form and shape of grooves and pecked marks. Also the difference in various styles can be attributed to a particular cultural group and time.



General view of a rock art site at Shuwaymis, northern Region.

CHAPTER 6

THE USE OF ROCK ART

What was the earliest use, purpose and function of rock art is still unknown to us, but it is now generally accepted by art historians that rock was developed as the earliest source of communication in prehistoric societies. We have no means to understand what a prehistoric human or animal figure actually stand for or means to those who created it. It is quite possible that a picture was intended to represent whatever it look like, or it may be possible that an ibex figure meant to represent an animal of prey; or a meandering and a serpentine figure was meant to represent a river; a circle means a well or water pond etc. Human like figure could be those of deities, mythical beings or an ancestor. A group of figures may be the record of a story, a song, an important religious occasion or illustration of some important religious, cultural or a war event. In spite of the fact that we may never be certain of what a rock art panel means or t he depth of is significance, we may start with simple description and recognition of visible evidence such as the fauna and flora, geometrical and non-representational motifs etc.

ART FOR ART SAKE

Laret and Christy in 1864 made the first attempt o explain the purpose or prehistoric rock art. They suggested that the abundance of wild animals could have made human life so easy and comfortable that they had plenty of leisure and that leisure was the nourishment of

art. Thus, prehistoric art was just for ornamentation and "Art for Arts sake". The French pre-historian Piette described Palaeolithic art as exclusively artistic. Graziosi, an Italian scholar, restricted such an interpretation of art for arts sake only to some material while Breuil suggested that the earliest art of the Magdelenian period would give pleasure to the Palaeolithic man and might have depicted just for arts sake. The art for arts sake theory continued to be accepted until the middle of the nineteenth century. In 1980, Sir Edward B.Taylor, and in 1890, Frazzer for the first time provided a synthesis of the complexity of modern primitive peoples living in Africa and Australia.



Figure 61. Realistic figures of animals like camel and date tree were depicted, as a past time leisure activity.

Towards the end of the 19th century ethnographic reports from Australia made it clear to the world that people still lived there in a cultural condition very similar to Palaeolithic people and produced a

remarkable number of complex painting and petroglyphs. Their reports showed that Laret and Christy`s assumption that artistic activity by hunters and gatherers required exceptional environmental conditions was ill founded. However, in Saudi Arabia hundreds and thousands of petroglyphs are located in the deserts and in very harsh, dry and most unfavorable environmental conditions The Saudi Arabian rock art which could be attributed to the Chalcolithic, Bronze and Iron Age was certainly depicted in an age when animals were very scarce in the region and climate was extremely hot, dry and hostile. However, we may assume that Arabian rock art was a result of both leisure and aesthetic activities and at the same time subject to certain reasons and motivations.

TOTEMISM

Totem is a social phenomenon and was common in many ancient African, American Indians and Australian societies. Man or a clan is recognized with his association and identification with other living creatures. It involves close connection of humans with some mythical being – so that an individual person had a totemic relationship to a living creature say an ostrich or an ibex – through a mythical ibex or a mythical ostrich personage. Thus a figure of an ostrich or an ibex could be the real portrait of an ibex or ostrich; or could be the representation of a person or clan which had an ibex or an ostrich totem and was recognized with that particular animal which was a mythic being or an individual or a clan.



Figure 62. Ostrich was probably a totemic animal in Najran area where petroglyphs of ostriches are located on several sites in the same area.

Frazer in 1887 published the first general work on totems giving all available evidence for totemic beliefs from all over the world. He wrote, "the relationship of an individual to the clan totem…(that) he will not ill it, he speaks of it as his brother, and call himself by its name".



Figure 63a. Image of a donkey from Shuwaymis.



Figure 63 b. Donkey was depicted as a totemic animal on several sites in wes t of al-Ula.

It is believed that some animals depicted in rock art were totemic animals. There apparently seems to be belief in totems in ancient Saudi cultures, particularly in the Najran area where large number of ostriches, and in the north, where ibexes are overwhelmingly depicted.

SYMPATHETIC MAGIC

Reinach in 1903, who earlier believed that Palaleolithic art was for art's sake, later suggested a new theory of `Sympathetic Magic` as a main reason of Palaeolithic Rock Art. According to this theory animals were depicted for success in hunting and to increase the number of animals that is `hunting Magic`, and `Fertility Magic`, were performed at the rock art sites to overcome the animal and also to increase their number. Reinach drew attention to the widespread

beliefs among living primitive peoples in sympathetic magic by which the human could overcome and gain control over the animals. North American Indians believed that by drawing animal on the rock, ground or sand, and then pricking it with a sharp stick or knife inflict a corresponding injury on the subject depicted on the rock or drawn on the ground. Thus, Reinch suggested that the basic reason of Palaeolithic art was the practice of sympathetic magic.

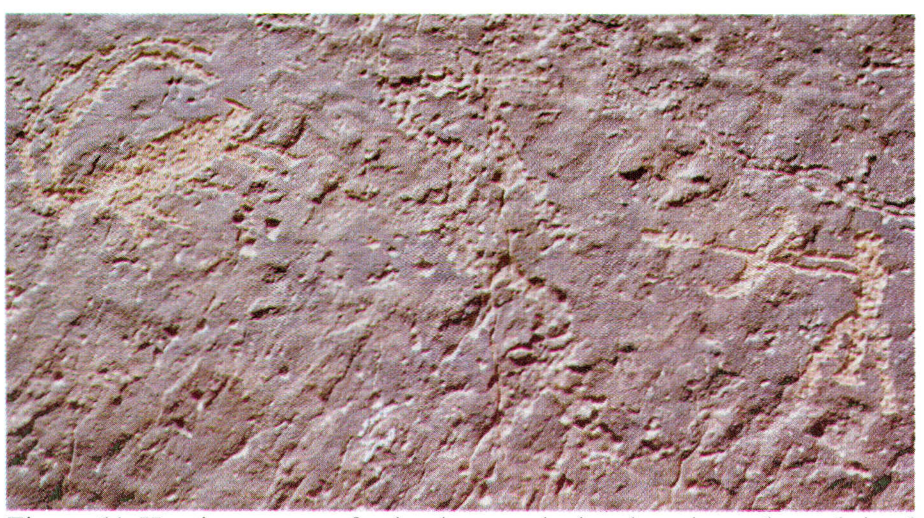


Figure 64. Hunting scenes of animals were depicted on the rocks and ritual were performed for success in the hunting as well as increasing their number.

The use of ethnographic parallels for the interpretation of prehistoric art continued to be adopted for long. Such ethnographic traditions still survive among some African tribes, Australian Aborigines and American Indians. However, it does no exist in the traditional Bedouin society of Saudi Arabia. No oral or otherwise knowledge of rock art practice does preserved in Arabia. The local Bedouins have no knowledge of who, why and when the rock art was practiced. We do not believe that the present primitive tribes of Africa or Australia practice rock art for the same purpose as their ancestors were doing. The purpose and function of Saudi Arabian rock art is still to be understood.

RECENT THEORIES

Leroi-Gourhan, the father of the present rock art studies in Europe and his counterpart Laming believed that prehistoric art is the result of a very complex system of beliefs and practices. Both rejected the use of ethnographic parallels as an aid to the interpretation of Palaeolithic art and both base their arguments and analysis on the context and contents of the art itself. Leori-Gourhan's analysis is based on the numerical data, and the grouping of certain animals and signs. He pointed out that certain species of animals are represented markedly more frequently than are others. He believed that the sings in rock art are symbolic and communicative. Ucko and Rosenfield (1977), Layton (1984) and Smith (1985), Quellec, Clottes, Bednarik and several other modern rock art specialists believed that rock art was symbolic and communicative and that the prehistoric artists practiced rock art to record certain messages, events and stories through symbolic animal and human images.

COMMUNICATION

It has been seen that in the prehistoric rock art of Saudi Arabia, the elements of schematization (that is simplification of traits) played an important role in distinguishing the art of different cultural periods. The scheme of representing human and animal figures varies from one cultural period to another. It is therefore possible, in the case of Saudi Arabian rock art, to distinguish and recognize the work of art of a specific archaeological/ cultural period on the basis of a particular "schema" and "styles".

There is usually a gradual change in art style from the earliest phases of rock art in Saudi Arabia (e.g. Neolithic) from the full sized realistic human and animal figures to he smaller and schematized representation in the subsequent period (e.g. Chalcolithic), and to the outlined and then to the stick or linear human and animal figures in later periods (Bronze/Iron Age). The superimpositions, overlapping and patina difference can help in recognizing different phases of rock art in Saudi Arabia.

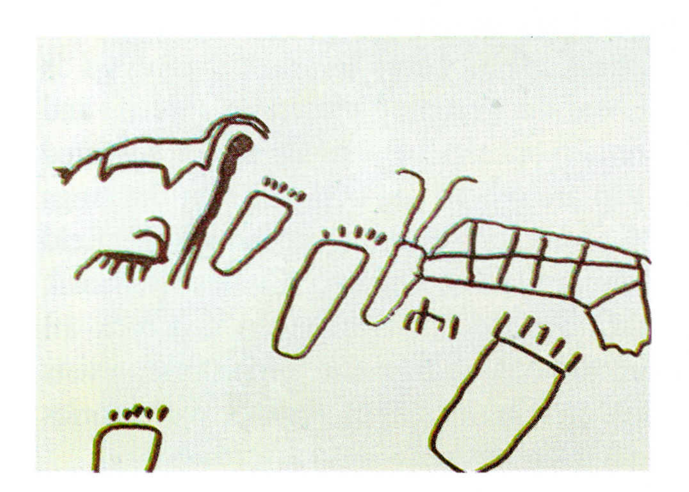


Figure 65. Composition of symbolic images to make a message, a story or a mysterious event communicated to the people who could understand it, but we cannot interpret it.

The continuous process of schematization and simplification of images from the earliest to the later phases suggest that rock art in Saudi Arabia was used for different purposes in different cultural periods. The reduction and simplification of figures gradually led to a systematic symbolic communication through simplified images, which ultimately led our ancestors towards the origin of writing.

CHRONOLOGY OF SAUDI ARABIAN ROCK ART

Evolutionary emergence of writing from rock art images

Rock art of Phase I:human and animal figures in naturalisitc style.

Phase II: Schematised human and animal figures.

Phase III: highly Schematic / abstract human representations.

Phase IV: Stick human and animal rspresentations.

a ha h da sh dh sa k ka b R

Phase V : Evolution of alphabetic letters from rock art images.

CHAPTER 7

PRESERVATION AND CONSERVATION OF ROCK ART

Rock art is a universal phenomenon; it is located in almost every country of the world. In the last few decades special attention has been given towards its conservation and preservation. The pained caves of France and Spain, and the painted rock shelters in Africa and Australia in addition to tremendous amount of petroglyphs all over the world are mostly in danger of destruction and vandalism. Although, they are preserved until now for the thousands of years, with the awareness of the importance and public and tourist interest have put these sites in to the danger of vandalism and destruction.

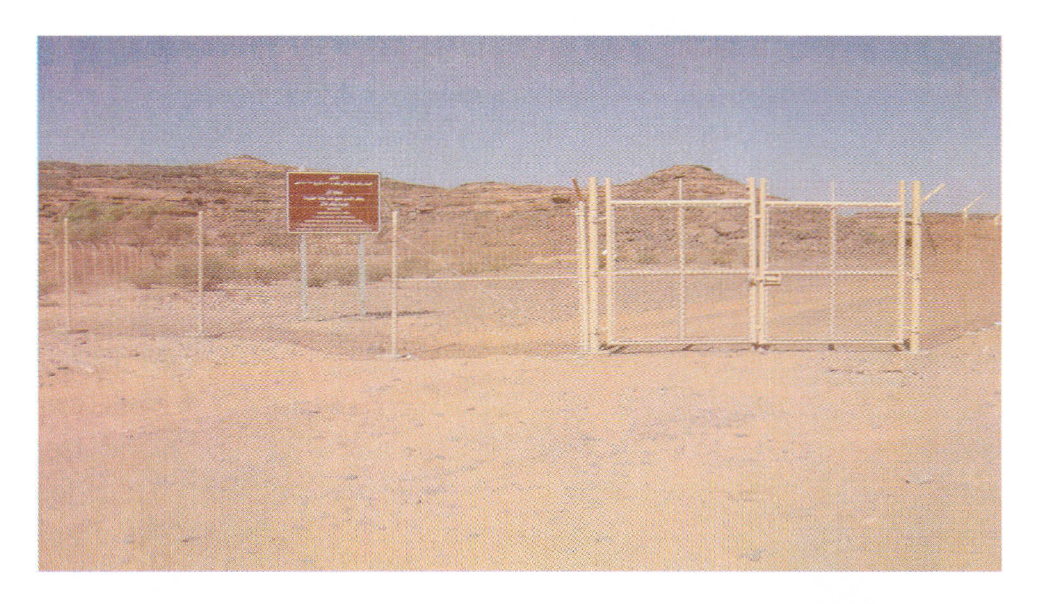


Figure 65. A major rock art site in Najran area has been fenced to protect it from vandalism.

The following points should be taken into consideration for the management and conservation of rock art imagery:

VISIT / TOURISM:

There is an increasing tendency of developing rock art sites for cultural tourism. Some time uncontrolled visitors disturb petroglyphs or painted figures by touching them, taking photographs by flash lights and even scratching and inscribing their names on such rocks. In far off places, in the deserts or in mountainous areas where there are no guards, visitors engrave or spray their names on the existing inscriptions and petroglyphs. This vandalism cannot be controlled easily; also it is not possible to station guards on all the sites (1,200 rock art and inscription sites in Saudi Arabia).





Figure 66. Vandalism by the visitors who spray and write their names over the cultural heritage that could be attributed to 2,5oo years before present.

Such vandalism could only be controlled by education, through electronic and printed media and through local government officials from the department of education, schools, or municipalities. It is most practicable and valuable to create awareness among the local people about the importance of the cultural heritage of their ancestors. This could be done by the teachers in the local primary and high schools, and through local museums and archaeological offices scattered in various parts of the country.

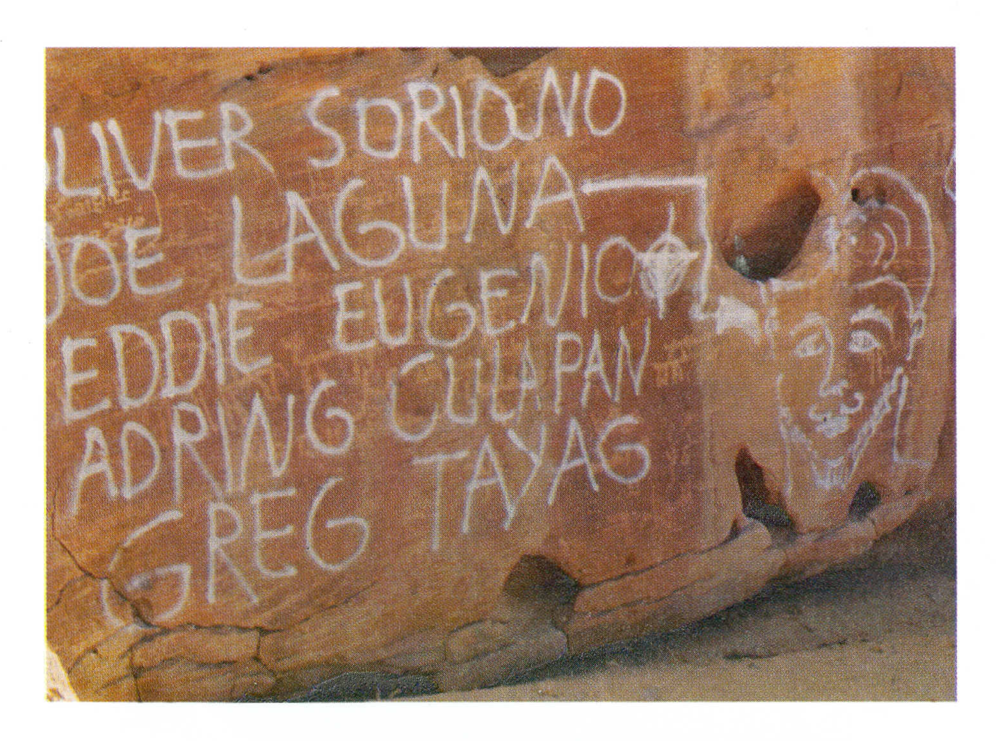


Figure 67. Another example of vandalism committed by the expatriate workers in this country.

The Deputy Ministry of Antiquities and Saudi Arabia has been trying to use all sources to control vandalism by public, tourists and the expatriates.



Figure 68. Some sites are fenced covering an area of 10 to 12 km. It is a unique and very outstanding conservation project in the world.

Over 300 rock art, inscription and archaeological sites have been fenced by the Deputy Ministry of Antiquities and Museums in various parts of Saudi Arabia. There is a guard's room inside each fenced area, and the guards are appointed from the local Bedouins living near such sites. Thus the guard not only protects the fenced site but all other sites found in the same area. This is the highly ambitious protection arrangement made in any country of the world.



Figure 69. The entire mountain of Jabal al-Lawz in Tabuk area has been fenced to avoid vandalism and destruction by the expatriates by illegal digging and excavations in search of treasure..

NATURAL CONSEQUENCES:

The natural consequences such as rain, temperatures, earth quakes, wind storm etc cannot be controlled but surprisingly for thousand of years the petroglyphs and painted sites in caves and under rock shelters are still preserved.

In a hot country like Saudi Arabia extreme high and low temperatures in winter and summer, and wide range in day and night

temperatures caused fractures in the rocks and many rocks containing petroglyphs have been disintegrated or in the process of destruction.

Growth of lichens, grasses and bushes around the rocks usually covered the rocks that contain petroglyphs; wind storms directly striking the rocks and sand granules hitting the petroglyphs during sands storms erode the images and inscriptions.

MANAGEMENT OF ROCK ART IMAGERY

Deputy Ministry of Antiquities and Museums in the Kingdom of Saudi Arabia controls and protects all the antiquities of the country. It has a very ambitious program of fencing and guarding major archaeological and rock art sites. There are laws in the country that govern and protect theft, vandalism, destruction and illegal export of antiquities. Antiquities laws in Saudi Arabia were imposed by a Royal Decree in 1392 H (1971 AD). Specific rules and punishments are imposed to protect the antiquities of the Kingdom.

INDIGENOUS CONTROL OF ROCK ART SITES

As a result of large scale publicity and efforts of the Deputy Ministry of Antiquities and Museums awareness has developed among the local people, especially those living in Bedouin camps, small towns and cities. Bedouins did not know who created petroglyphs on the rocks and they thought it to be the work of some unknown people of the past. But, now with proper education and publicity they understood its importance and believed to be the work of their ancestors. Understanding it as their own cultural heritage now, they protect and safeguard the antiquities and rock art imagery found in

their own territories. It is not possible now for strangers to visit the rock art and archaeological sites and destroy them, or dig there or paint or spray the names on the rock art sites.

The Deputy Ministry also gives honorarium to those people who discover new sites and inform to the Deputy Ministry about any rock art or archaeological sites. This also encourages and creates awareness among the local people about the importance of these sites.



Figure 70. General view of a rock art site in Najran. Camel and horse riders as if in running posture.

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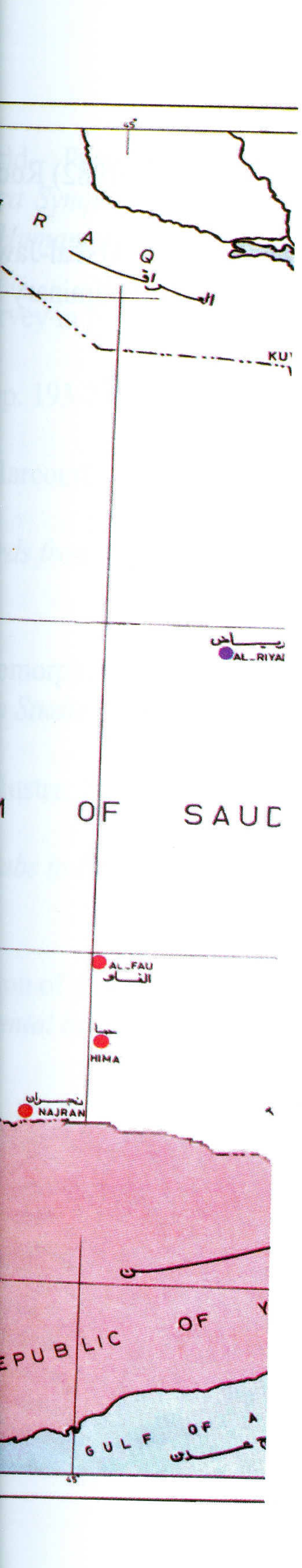
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MED. SEA
PALESTAINE
فلسطين
الاردن
JORDAN
I R A Q
kilwa
DUMAH
(AL_JAWF)
الجوف
TABUK
تيماء
TAYMA
TUBAH
HAIL
حائل
مدائن صالح
MADAIN SALIH
AL_ULA العلا
shuwaymis
R E D S E A
AL_HANAKIYAH
الحناكية
AL_MADINAH
المدينة المنورة
AL_RIYA
EGYPT
مصر
KINGDOM OF SAUD
جدة
JEDDAH
MAKKAH
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المملكة العربية السعودية

أهم مواقع النقوش والرسومات الصخرية

KINGDOM OF SAUDI ARABIA

MAJOR ROCK ART AND INSCRIPTION SITES

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IRAN

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ARABIAN GULF

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QATAR

قطر

UNITED ARAB EMARATES

الامارات العربية المتحدة

GULF OF OMAN

خليج عمان

ARABIA

THE EMPTY QUARTER

الربع الخالي

SULTANATE OF OMAN

سلطنة عمان

ARABIAN SEA

البحر العربي

SUQUTRA

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